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ORIGINAL COMMUNICATIONS.

INJURIES TO THE FŒTUS DURING LABOR.¹

BY THEOPHILUS PARVIN, M.D.,

Professor of Obstetrics in the Jefferson Medical College,
Philadelphia.

Though injuries of the child during labor are not frequent, probably they are much less rare than is commonly believed. In many instances they are not recognized immediately after delivery, and they may disappear spontaneously, and in some their consequences are attributed to erroneous causes. Some of these lesions may happen in spontaneous labor, and others in artificial, whether the interference be manual or instrumental. It is impossible to classify them according to their causes, and apparently their most satisfactory division is one resting upon the regions or parts affected. Hence, in the paper now presented, injuries to the fœtus in labor will be divided into those involving the head and neck, those of the trunk, and, finally, those of the extremities.

Injuries of the Head and Neck.

Contused wounds of the scalp and of the face, and incised, punctured, and lacerated wounds of the former are met with. So far as contused wounds of the face are concerned, it usually happens that they follow difficult delivery with the forceps, especially if the instrument be a powerful compressor; so too these result if the blades

are applied obliquely, or antero-posteriorly to the head, instead of to its sides. But in almost all cases the effects are trivial and soon disappear. Punctured and incised wounds of the scalp have been made from mistaking a caput succedaneum for the foetal sac. Tarnier mentions an instance of a wound thus inflicted leading to the death of the child from erysipelas, a few days after birth. More extraordinary is a lacerated wound of the scalp, made in the effort to apply forceps, the operator introducing one of the blades between the scalp and the cranial bones. An example of this terrible blunder is mentioned by Charpentier, and I have met with a similar case.*

Sloughing of a portion of the scalp has been observed following some cases of spontaneous labor. Thus, Priestley¹ has reported a case of this kind, resulting in death eight days after delivery; the labor was protracted for forty-eight hours because of a narrowed pelvic outlet. Lizé,² of Mans, states that in the case of a multipara, forty years of age, the bag of waters ruptured five days before the birth of her child, which presented by the vertex, but occupied an occipito-sacral position. Five days after delivery, a slough involving almost the entire extent of the occipital bone appeared; three days subsequently it became detached and the child recovered. Bouchut³ quotes from Lorain a case of gangrene of the scalp in a new-born child occurring in the service of Moreau. The mother was a primipara, and the labor lasted forty-eight hours, terminating sponta-

¹ A paper read before the Philadelphia County Medical Society, October 26, 1887.

¹ London Obstetrical Society's Transactions, vol. i.

² *Annales de Gynécologie*, 1875.

³ *Traité pratique des Nouveau-Nés*, etc.

neously; the child died on the nineteenth day. Dr. Goodell informs me of a case in which an oblique application of the forceps was made—one blade being in relation with the right frontal bone, and the other with the left occipital—and the right anterior portion of the head was so bruised that sloughing occurred a few days after birth. After the detachment of the slough, a fatal hemorrhage occurred.

Depressions and fractures of the cranial bones, separation of their union to each other, fractures of the bones of the face, as well as disjunction of their articulations and joints, have been observed more or less frequently in cases of difficult labor, manual or instrumental—some of them, indeed, in spontaneous labor. Some obstetricians have asserted that depressions of the bones of the foetal skull are always accompanied by fractures. This was the opinion of Danyau, of Lachapelle, and of Schröder. But a case,¹ given by Matthews Duncan, seems to strengthen the view held by most obstetricians, that such depressions may occur without the bone being broken. The case was one in which a persistent impression was made on the right parietal bone, by the finger of the accoucheur, who was endeavoring to cause rotation. The result was slight, short, but frequently repeated epileptiform seizures, which lasted some time after the impression had disappeared, and were finally replaced by choreic movements. It seems hardly probable that the pressure of the finger produced a fracture of the bone.

Dugès² has given an instance of great depression in one of the parietal bones, not followed by any serious consequences. The child was delivered by the feet through a pelvis of which the conjugate diameter was estimated at three inches and a quarter. Powerful traction upon the shoulders and upon the lower jaw was necessary to bring the head past the obstruction, and the parietal bone, which was in relation with the sacro-vertebral angle, presented a depression half an inch in depth and two inches in breadth. The infant was resuscitated with difficulty, then had convulsions, but in a few days was quite well, and in fifteen days the depression had entirely disappeared.

Minor depressions or indentations are sometimes seen, especially after the application of the forceps, and in rare instances such marks are permanent. But we must not be in haste to conclude that these indentations,

found upon the head of a newborn child, are proofs of instrumental delivery, for Oslander¹ has stated that, having delivered a child by podalic version through a narrow pelvis, he found upon its head a depression into which the end of a forceps-blade accurately fitted; so that he himself would have concluded, had he seen a similar depression, that the delivery had not been spontaneous, but by the forceps.

Fractures of the fetal skull have been observed as the result of direct violence, as when a woman expels her child while she is standing, and it falls on the floor. Or, again, a woman,² near the close of the second stage of labor, the child's head being at the vulvar opening, threw herself out of the window, and several fractures of her limbs, as well as a fracture of the child's head, resulted. But apart from these cases in which the injury has resulted from direct violence, and those observed in delivery, whether spontaneous, manual, or instrumental, in narrowed pelvis, which will be referred to in a moment, fracture may occur when the labor is in all respects perfectly normal, so far as duration and facility are concerned. Thus, Dr. Charles West³ has reported a case of an infant dying from convulsions nine days after birth, the labor having been an easy one and lasting but five hours. The mother had previously given birth to two living children, and these labors too had been normal. Yet, at an autopsy of the third child, a fracture of the right parietal bone was discovered, with effusion of blood between the cranium and dura mater, the effusion being more than half an inch thick and occupying the entire fossa of the bone. Dr. West states in his report that fractures of the skull have been known to take place during easy labors, and wholly independent of any preternatural degree of ossification of the skull. Monteith¹ mentions having attended a case of perfectly natural labor, in which the child had a fracture of the right parietal bone. There was a marked depression in the middle of the bone, and the fracture extended to the sagittal suture on one side, and to the coronal on the other. It is quite apparent that a case such as either of these might give rise to

¹ Given by Cieslewicz, *Verletzungen des Fœtus durch den Geburtshelfer*. Halle, 1870. Cieslewicz gives forty cases of fracture, fissure, contusion of nerves, laceration of muscles, separation of epiphyses, etc., occurring in labor; he also reports two of rupture of the longitudinal sinus.

² Quoted by Delore, *Fractures du Fœtus*. Dictionnaire Encyclopédique des Sciences Médicales.

³ Transactions of the London Medico-Chirurgical Society, 1845.

¹ *British Medical Journal*, October 18, 1873.

² Quoted by Jacquemier, *Manual des Accouchements*. Paris, 1846.

medico-legal investigation, or to unjust censure of the obstetrician.

In regard to fracture of the bones of the cranium or face, or rupture of the joints of the maxillary symphysis, or of the cervical vertebræ, or fracture of a vertebra—for it is claimed that usually the body of one is broken rather than two vertebræ are separated, as the consequence of great traction occurring in manual or instrumental delivery—an important question arises as to the amount of force which may be safely used either with hand or instrument. In illustration of the great force which has been employed in forceps delivery without injury to mother or child, I quote the following from Dr. Peugnet.² He states: "I was called to Mrs. K., a multipara, in labor with her third child. The first two were delivered by craniotomy. The vertex presenting, R. O. A., and impacted between the sacrum and the pubes, the conjugate diameter of the superior strait greatly contracted, I applied forceps, and had great difficulty in locking them. Dreading the laceration which might ensue in this case from side-to-side lever action, I concluded to rely upon direct and steady traction. My strength giving way, her husband held me round the waist, whilst the patient was held *in situ* on the dorsum by four women. In forty-five minutes I had the satisfaction of bringing the head down upon the perineum. The delivery was then speedily accomplished. Both mother and child, a girl, did well." The least that can be said in regard to this case is, that the result was very remarkable, and it is doubtful if the practice pursued could be repeated in any considerable series of similar cases without injury to both mother and child.

Delore,³ after remarking that the foetal head may endure, without injury, a great compressing force if applied to a large surface, and if made by a regularly concave surface, as that of the blades of the forceps, states that from his experiments he found a compressing force of one hundred kilogrammes (250 pounds) did not cause a fracture. But, on the other hand, if the blades slip, if the pressure is made upon a small surface, fracture follows the exercise of much less force. Further, a blunt, angular body, such as the sacro-vertebral angle, the spherical surface of which is described by a radius of two or three centimetres, produces a fracture with a force of twenty kilogrammes (50

pounds). As the force which is exerted in difficult labor is more than twenty kilogrammes (50 pounds), fracture results. Nevertheless, these results are not in complete accord with those of Goodell,¹ though, as will be seen, he is discussing the question of the amount of traction force that may be used in a narrowed pelvis without injury to the neck of the child. Nevertheless, the subject of injury to the bones of the head is also involved, and in only one instance, I believe, does he mention fracture of one of the cranial bones. He states that he has on several occasions delivered living children after throwing on their necks a weight of 130 pounds. He further says that, although exerting all the manual strength at his command, he has never seen the body part from the head. He mentions one instance in which there was not the slightest apparent injury to the neck, though the sacral side of the head had been broken in. Further, in another case, the force of traction upon the child's head, combined with suprapubic pressure, amounted to 200 pounds. Stone² has more recently reported a case of podalic version, and delivery by traction through a narrowed inlet, in which he put on the neck of the child all the force of which he was capable, using the pump-handle movements described by Goodell. The child was dead. There was no fracture of the bones of the head. The spine had parted in the upper dorsal region during the traction upon the trunk, which was necessary to cause the shoulders to come low enough to reach the arms. The cervical spine was not broken.

Delore's conclusion as to the amount of force followed by fracture of the cranium of the foetus is erroneous, or such injury ought to have been observed in all cases where a force even approaching 100 pounds was used. Champetier's³ investigations as to the force that could be safely used in the delivery of the foetus, led him to the following conclusions, the first of which does not correspond with the results obtained by Goodell: First, there is danger of fracturing one of the parietal bones, whatever the method of extraction, if the total force employed reaches thirty-five to forty kilogrammes (87-100 pounds), the infant being at term, twenty to twenty-two kilogrammes if it be premature. Second, the inferior maxilla of a child at term will bear, without rupture, a traction of twenty-five kilogrammes (62½

¹ London *Lancet*, November 14, 1874.

² *Ohio Medical and Surgical Journal*, 1878.

³ *Op. cit.*

¹ *American Journal of Obstetrics*, 1875.

² *Medical and Surgical Reporter*, February, 1880.

³ *Du passage de la tête foetale a travers le détroit supérieur rétréci du bassin.*

pounds). Third, the vertebral column of an infant at term was ruptured in three cases by a force of fifty kilogrammes (125 pounds).

If it is objected that these results have been obtained by experiments upon dead children, and, therefore, are not applicable to the force which may be exerted upon living ones, the answer of Matthews Duncan may be repeated. He, after consulting physiological and physical authorities, could say that a child living and one recently dead were the same as to tensile strength.

In this connection it is well to refer to the amount of traction which may be safely applied to the lower jaw of the foetus, as stated by Duncan¹ from his own experiments. It will be observed that his results are not the same as those announced by Champetier. Duncan states: "It is now ascertained that a force of half a hundred weight (fifty-six pounds) may, at least in some cases, be applied by dragging the lower jaw of the foetus without producing any easily discovered injury of parts." He further says, that compound dislocation would be almost certainly fatal, and in one of his experiments this injury was inflicted by a weight of fifty-six pounds. Not only does Duncan's statement as to the force which the inferior maxilla will bear without injury differ from that of Champetier, but the difference is still greater from that given by Delore, who makes this forty kilogrammes (100 pounds).

Fractures of the cranium usually involve the parietal bones, but they may also occur in the frontal, in one of the temporals, or in the occipital bone. Jacquemier first pointed out the separation between the squamous and the basilar portion of the occipital bone, to which some more recent writers² have directed attention without giving him just credit. He also stated that he had met with fracture of the occipital bone, above the protuberance. Ruge,³ referring to separation of the epiphyses between the squamous portion of the occipital bone and the articular part, states that Schroeder is the only one who has recently drawn attention to it; and, notwithstanding its importance in regard to the life of the child, this lesion is not referred to in classic works as one of the immediate consequences

of extraction. The lesion may also occur in a narrowed pelvis, though the head present. In these cases there may be not only effusion of blood, but further compression, from the squamous portion having its anterior inferior margin forced against the medulla.

On the other hand, severe injury of the frontal bone has been observed without serious consequences. Thus, Dugès¹ saw a child recently delivered, whose left eye was almost completely outside the orbit, so great was the depression of the frontal bone; yet the infant did not have convulsions or any other grave symptoms. I have seen protrusion of the eyeball in a newborn child, following fracture of the frontal bone by Hodge's forceps, in a case of tedious labor in a primipara, the delay being from an occipito-sacral position. The child lived for a week. That an infant may survive very grave injuries in labor is proved by a case reported by Lamotte,² in which a surgeon, in a case of shoulder presentation, had torn away the arm, and then performed a craniotomy, evacuating a large amount of the cranial contents; yet the child was born alive.

Zweifel³ regards fissures and fractures of the cranial bones as of clinical significance only if a sinus be injured and consequent hemorrhage occur. On the other hand, Delore⁴ asserts that all these fractures are grave, on the ground that they may be accompanied by contusions of the brain. Further, there may be hemorrhages between the bone and the periosteum, in the cavity of the arachnoid, or between the pia mater and the brain. If the solution of continuity be at the position of a sinus, there is frequently rupture of the vessel. He adds that in all cases in which the head has undergone severe compression from dystocia, he believes hemorrhages occur. The significance of this last remark will be appreciated, especially when we consider the remote consequences upon the mental condition of the child, as urged more especially by some English observers.

Injuries to the bones of the face are usually of the inferior maxilla. This bone may be fractured, or separation of the mental symphysis may occur. Ruge mentions cases in which, in addition to injury of the bone, there were lesions of the soft parts—as, for example, tearing of the skin at the angle of the mouth, as well as of the mucous membrane of the pharynx, and rupture of the

¹ London Obstetrical Society's Transactions, vol. xx.

² Thus Bednar, *Die Krankheiten der Neugeborenen und Säuglinge*, Wien, 1863, refers to it as a hitherto unobserved injury.

³ *Bulletin de Thérapeutique*; from *Zeitschrift für Geburtshilfe und Frauenkrankheiten*, 1875.

⁴ Jacquemier, op. cit.

⁵ *Traité des Accouchements*, 1726.

⁶ *Lehrbuch der Geburtshilfe*.

⁷ Op. cit.

genio-glossus muscle. Yet, if we fail to use traction upon the lower jaw in cases of difficult head-last labors, we miss what may prove an important means of delivery when other means fail. Some years ago, in a case of narrow pelvic inlet, having failed to deliver with forceps, I performed podalic version, and sought to deliver by traction, while a consultant aided me with suprapubic pressure. I am confident that I did not use the force which some operators have employed safely under similar circumstances; yet the cervical vertebræ gave way, either by separation or by fracture, and I found apparently nothing but the integument holding the head to the body. I then succeeded by traction upon the inferior maxilla, suprapubic pressure assisting, in bringing the head into the pelvic cavity.

That the head may be left in the uterus, the body being dragged away, is a fact proved by occasional instances in the history of obstetrics. In other cases the division had been made, not by rupture, but by cutting through the neck. An instance is reported¹ in which the obstetrician, failing to deliver the head in a case of shoulder presentation, after detaching the arm and bringing down the feet, performed decollation, and the head and the placenta remained in the uterus for forty days. Freund mentions a case in which the head was left in the uterus for ten years.

Probably the most remarkable case of multiple injuries to the face has been recorded by Petit.² The face presented, rupture of the uterus occurred, and the woman died undelivered, though the forceps had been used. The autopsy of the child showed multiple separations of the bones of the face, and fractures.

Paralysis of one of the facial nerves has been observed most frequently, but not exclusively, after the use of the forceps. In a paper read before the American Gynecological Society in 1885, I referred to eight cases of spontaneous facial hemiplegia, and also mentioned one case observed by Seeligmüller, in which the paralysis affected both sides of the face. But the disorder usually occurs from the use of the forceps, and is caused by the pressure of one of the blades at the stylo-mastoid foramen, or a little in front of the lobe of the ear. Landouzy, who has best described this affection, has remarked that in the infant the complete absence of the mastoid apophysis and the slight development of

the auditory canal, favor compression of the facial nerve near its point of emergence. According to Parrot and Troisier, recovery usually takes place in six weeks in paralysis of the facial nerve caused by the forceps. Many cases, however, get well in ten days. Nevertheless, while recovery is the rule, it should be remembered that in some cases the injury is permanent. Duchenne³ refers to two patients, one fifteen years old, and the other five years and a half, in each of whom the paralysis continued. It should also be observed that there may be facial paralysis in the newborn, caused by protracted labor and intracranial hemorrhage.

Injuries of the sterno-cleido-mastoid muscle have been observed by several practitioners. Torticollis, of obstetric origin, is explained by Stromeier and Dieffenbach as resulting from improper application of the forceps, the muscle being bruised or torn. But this explanation is rejected by Saint-Germain as not plausible. A very large proportion of infants that have wry-neck are born with pelvic presentation, and it is asserted that the traction exerted causes rupture of some fibres of the muscles; a hæmatoma follows, and, finally, contraction of the cicatricial tissue results in drawing the head into an unnatural position. One of the first references to tumors of the sterno-cleido-mastoid was made by Melchiori² in 1862. He spoke of them as indurations of muscle, sometimes met with in young infants, and to which he found no reference in authors. He met with this disorder four times, and he described the affection as an indurated, plastic deposit. While he mentions temporary deformity of the neck, he does not speak of any case in which this was permanent. In referring to its etiology, he suggests that compression of the muscle, or laceration of some of its fibres, may take place during labor. The next year both Dr. Wilks and Sir James Paget³ met with cases of what they described as chronic induration of the sterno-cleido-mastoid. Another case of the affection was reported the same year by Dr. Harris; and thus the published cases in a few months numbered at least six. But no reference was made by any of the reporters to the previous observations of Melchiori.

Bryant,⁴ in 1863, reported two cases of thickening of the sterno-cleido-mastoid.

¹ See Nadaud; *Des Paralysies Obstétricales des Nouveau-nés*.

² *Medical Times*, London, August 9, 1862.

³ *London Lancet*, vol. i., 1863, pages 11, 236 and 313.

⁴ *London Medical Times*.

¹ *Obstetric Gazette*; from *Archiv für Gynäkologie*, March, 1883.

² *Annales de Gynécologie*, 1874.

One patient was four, the other eight weeks old, when he saw them. In each instance the birth was with pelvic presentation. Probably in all the cases, or at least in a majority of them, the disease was hæmatoma. Nevertheless, Blachez¹ regarded these tumors as caused by an interstitial myositis, in consequence of traction upon the muscle. He describes the tumor, observed in one of his patients, as elastic, almost painless, and the size of a pigeon's egg; it was situated in the right sterno-cleido-mastoid, and was not discovered until two or three weeks after birth, when the attention of the parents was called to it by the infant's keeping the head inclined to the right side. Zweifel recognizes injuries of the sterno-mastoid muscle in labor as a cause of torticollis. Professor Albert,² of Vienna, referring to a child with torticollis, stated that the sterno-cleido-mastoid may become contracted during intrauterine life, or be injured during birth. In breech presentations, and in difficult forceps delivery, a laceration of this muscle may occur, and be followed by inflammation and contraction.

While such injury is more frequent after head-last labors, yet they are also met with in vertex presentations, and if the forceps have been used.

Injury to the brain.—On October 2, 1861, a paper was presented to the London Obstetrical Society by Dr. Tyler Smith for Dr. W. J. Little, the title being "Upon the influence of abnormal parturition, difficult labors, premature birth, asphyxia neonatorum, on the mental and physical condition of the child, especially in relation to deformities."³ In this paper—which by the way mentions two cases of wry-neck, attributed to difficult labors—the author says: "It is impossible not to connect the persistent affections of the intellect, of volition, and of organic life, with the injury the several nervous centres, suffered in some instances before the foetus had reached the maternal pelvis; in others whilst in transit through it; and in a third set of cases, where the foetus was exposed to neither of these kinds of injury, it suffered from asphyxia neonatorum, suspended animation, and its concomitant congestions, effusions, capillary apoplexies of the brain, medulla oblongata, and spinal cord." Dr. Langdon Down, in discussing the obstetrical aspects of idiocy, stated that in a very large number of cases of idiocy the subjects were born after difficult and unusually tedious

labors; and he held that if a neurotic tendency was present the tedious labor and suspended animation might determine the catastrophe, where otherwise all might have gone fairly well.

The following note from one of Dr. Little's¹ correspondents may be of some interest; it is in reference to a young man in regard to whom inquiry had been made by Dr. Little: "I have again ascertained he was asphyxiated for two hours when born, and that he has always been a weak creature; very slow in mental development; with difficulty in speaking; trembling and shaky; unable to fix his attention on a book; and a bit of a punster." The final statement, "a bit of a punster," is conclusive as to the intellectual feebleness of this unfortunate man! These views are further strengthened by the statement of Dr. Arthur Mitchell,² that he believes there is a connection between difficult labor and idiocy.

Injuries of the Trunk.—The chief lesions of the trunk are: rupture of the connections between the dorsal vertebræ, or fracture of one of these; injuries to the abdominal wall by a badly directed blunt hook; effusion of blood in muscles, similar to those that have been referred to as occurring in the sterno-cleido-mastoid; retropleural hemorrhages along the spinal column in case rupture of this column occurs; hemorrhage into the abdominal or thoracic cavity; collections of blood beneath the capsule of the liver, or of the kidneys; and rupture of the sacro-iliac joint. Ruge has collected forty-four cases of injury to the foetus occurring in extraction after version, and twenty-nine of injuries in pelvic presentations. In the former there are three cases of rupture of the sacro-iliac joint. It is probable, as suggested by Zweifel, that some cases of ankylosis affecting this joint, of which the etiology is obscure, are to be attributed to injury in birth. Zillner³ has reported a rupture of the sigmoid flexure occurring in labor.

Injuries of the Arms.

In connection with these lesions those of the scapula and clavicle, which belong to the arms rather than to the trunk, will be considered. Delore states that *fractures of the humerus* are more frequent than all others, as they are usually readily cured, and are generally caused by *mal-adresse*; they are rarely published. But he further says that this accident may occur in the hands of the most expert

¹ *Gazette Hebdom.*, May 19, 1876.

² *Obstetric Gazette*, September, 1882.

³ *Obstet. Society's Transactions*, vol. xviii.

¹ *Obstetrical Transactions*, vol. iii.

² *Medical Times*, 1862, 1863.

³ *Centralblatt für Gynäkol.*, 1885.

accoucheur, if the pelvis be contracted. They occur most frequently in the disengagement of the arms after podalic version, when extraction is necessary; and they may also happen in pelvic presentation, but usually, if we do not have to extract the child—that is, if the expulsion can be left solely to nature—the arms will not ascend, but remain applied to the chest. Smellie¹ states that he fractured the humerus in a case in which he turned, and delivered by the feet. This is the only case he gives, while he mentions three cases of fracture of the femur, two occurring in the practice of his assistants, and one in his own.

All obstetricians agree that in bringing down an ascended arm it is important that no pressure be made until the internal angle of the elbow is reached, and that three or four fingers should be employed, and not one or two. Pajot regards it as important that the posterior arm should be liberated first. Küstner² describes separation of the epiphysis of the head of the humerus from the diaphysis as one of the injuries of labor which may be overlooked, or falsely regarded as a luxation, a fracture of the neck of the scapula, or an injury to nerves. Fractures of the clavicle, separation from its sternal attachment, transverse fracture of the scapula, separation of the epiphysis of the neck of the scapula, injury of the acromion process, and dislocation of the humerus, have been observed.

Fracture of the Clavicle is most frequently caused by pressing directly with one or two fingers, in the endeavor to bring the head through the pelvic inlet after podalic version, or in pelvic presentation. McClintock, in one of his annotations to the

Sydenham Society's edition of "Smellie," observes, "Although Smellie gives no example of fracture of the child's clavicle during delivery by the pelvic extremities, yet, in my experience, it is a bone very apt to be broken by the manipulations of the accoucheur, more so even than the humerus; this may, perhaps, be explained by its greater degree of ossification."

Paralysis of the Arm.—Sinkler recognizes hemiplegia as, in some cases, the consequence of injury at the time of birth, either from the forceps or from the pressure of a prolonged labor. Nadaud gives seven cases of paralysis of the arm attributed to the forceps; the first case of this injury reported is one of Smellie's. Jacquemier mentions an instance of paralysis of the deltoid following a long and difficult, but spontaneous, labor; the recovery was complete in fifteen or twenty days. He attributed the disorder to compression of the axillary nerve against the humerus at the point of its attachment to the deep face of the deltoid. Fäsbender found a tumor, as large as a pigeon's egg, situated above the right clavicle, in an infant soon after delivery; the hæmatoma gradually disappeared, but at first there was paralysis caused by nerve compression. Delore suggests that paralysis may be caused by the rupture of a nerve trunk near its connection with the spinal cord. He states that this accident is not rare in the new-born, or in young infants, as a consequence of traumatism; it is followed by incurable paralysis, which is compatible with life if an upper member only is affected. Disengagement of the extended arms in pelvic deliveries, and traction upon the axilla in delayed delivery of the body in vertex presentation—the traction in some cases being with the blunt hook, in others with the finger—have resulted in paralysis of the arm. The same disability has occurred in a case in which the arm protruded in shoulder presentation and delivery was effected by podalic version.

Luxation of the humerus has, in some instances, been mistaken for obstetric paralysis. Further, it is important to distinguish between cerebral and traumatic paralysis. Duchenne¹ gives an instance in which there were both cerebral and obstetric paralysis, the latter consequent upon a fracture of the ulna near the elbow.

Injury to the Legs.

Fracture of the femur may be spontaneous, or consequent upon artificial delivery.

¹ Sydenham Society's edition of Smellie's Midwifery, vol. iii., pp. 296, 297. This great obstetrician, in the first volume, remarks: "In laborious or preternatural cases, when considerable force hath been used in delivering the child, the whole body ought to be examined, and if there is any mark or contusion on the head, it will disappear if anointed with pomatum, and gently rubbed off or chafed with the accoucheur's hand; if any limb is dislocated or broken, it ought to be reduced immediately; luxations, though they seldom happen, are more incident to the shoulder than to any other part, the humerus being easily dislocated, and as easily reduced. The ones of the arm and thigh are more subject to fracture than any other of the extremities; the first is easily cured, because the arm can be kept from being moved, but a fracture of the thigh-bone is a much more troublesome case, because over and above the difficulty of keeping the bones in a proper situation, the part is often necessarily moved in cleaning the child."

² Ueber die Verletzungen der Extremitäten des Kindes.

¹ See Nadaud, op. cit.

Meyer has recently¹ reported two cases in which spontaneous fracture of the femur was observed; in one a single femur was broken; in the other both femurs. In May, 1847, Dr. Vanderveer² reported a case of such a fracture in childbirth. But probably more fractures of the femur are to be attributed to the attempt to pull down a lower limb in pelvic presentation, when the presenting part is already partially in the mother's pelvis, before pressing up the presenting part, or from the use of the blunt hook. Delore's experiments show that with the untired finger traction to the amount of fifteen kilogrammes (37 pounds), may be made upon the groin, and this cannot break the femur. If a force of fifty-five kilogrammes (137 pounds) is exerted upon the femur, fracture occurs; if the instrument be perpendicular to the bone, the latter gives way with a pressure of twenty kilogrammes (50 pounds).

Again, the femur has been broken, or separation of the epiphyses has been caused, by traction upon the leg. A. R. Simpson mentions an instance in which podalic version was performed, the right lower limb brought down, and traction made. Subsequent examination showed that there were three fractures of the femur.³

Luxations of the femur, consequent upon obstetric operations, are exceedingly rare according to Ruge. In 300 autopsies upon new-born infants, he did not find a single true dislocation of this bone. Küstner, in referring to luxations of the hip, speaks as follows: "Göschel relates a case in which Langenbeck reduced such a luxation after the subject, a girl, was thirteen years old, and mentions in this connection that Stromeyer had met with twenty cases. The only possible way in which this injury could occur would be by sudden and violent force drawing down the limb, and then dislocation upon the ilium might result. But the force must be great. I have suspended to the leg of a child, from six to ten minutes, a weight of from thirty to forty kilogrammes (75-100 pounds), without any injury to the joint."

Complete paraplegia, in connection with facial paralysis of the right side, has been observed following a difficult labor in which the forceps were used. Examples of rupture of the spinal cord, in connection with rupture of a vertebra, have been observed, and, of course, paralysis of the lower limbs. It is

remarkable that, in two such cases the children lived for some hours. Paraplegia in the new-born is, as Nadaud states, usually an evidence of serious lesion of the cerebro-spinal organs, and the child dies after a short time.

I think the study of these cases of obstetric injuries, which might be greatly extended—for much more remains unsaid than has been said—ought, in the first place, to lead us to a larger charity for fellow practitioners, as many of the most serious injuries in childbirth may occur without the slightest blame necessarily attaching to the accoucheur. Another lesson is that an important distinction should be made, as urged by Ruge, between podalic version and extraction, and that we should never resort to the latter, unless absolutely necessary, after the performance of the former. Thereby many of the obstetric lesions of the foetus may be avoided. Lamotte very wisely says, referring to the injuries which may be done to the child by the accoucheur: "The hand improperly used is more dangerous than any instrument."

Again, the question arises as to the safest manual means for the delivery of the head in head-last labors. In Cieslewicz's collection of cases of injury to the foetus in labor, there are several in which very serious consequences resulted from employing the Prague method. One of these, reported by Guserow, showed, upon post-mortem examination, such complete rupture of the vertebrae and most of the soft parts of the neck, that the head was attached to the trunk only by the skin and the vertebral arteries. Ruge, rejecting both the Prague and the Vienna method, prefers elevation of the occiput, bringing the face down, and carefully conducted expression, as least liable to injure the foetus.

Another question of practical interest is the best method of delivery in pelvic presentations, when interference is necessary. Should we follow that employed by Goodell, in all cases bringing down a foot as soon as possible, and thus command the situation, in case necessity for extraction arises? Must we use the blunt hook? Is the application of the forceps to the breech to be generally advised?

Again, while treatment of fractures of an upper limb, or of the clavicle, is said to usually present no great difficulty, can a similar statement be made as to fracture of the femur? What method of treatment is best?

In depressed fractures of the skull, is it

¹ *Archiv. f. Gynäkologie.*

² *New York Medical Journal.*

³ *Edinburg Med. Journ., 1880.*

not probable that some lives might be saved by the use of the trephine? and in other cases, not followed by death, perfect mental integrity be insured?

Finally, many questions as to the diagnosis of obstetric paralyses of the new-born arise, and, also, as to when and what treatment should be employed.

EXPERIENCE WITH VERATRUM VIRIDE.

BY A. ADY, M.D.,
MUSCATINE, IOWA.

The editorial on veratrum viride, in the REPORTER of October 29, prompts me to narrate my experience with this drug. I have been using it for thirty-four years, and it has disappointed me fewer times than any other medicine. In proper doses, I do not believe that it has any tendency to weaken the heart. On the contrary, by slowing its contractions, it gives that organ time to rest and recuperate. As a heart tonic I consider it equal, or superior, to digitalis; as a controller of the heart and arteries, superior to all other remedies in use.

In all inflammatory disorders in which the action of the heart is too strong and frequent, it is superior to blood letting. In acute pleurisy and pneumonia, when a patient is brought thoroughly under its influence, he is about cured. The cumulative effects of veratrum viride are not dangerous, as they are relieved by vomiting, after which the patient will almost invariably ask for something to eat.

In typhoid fever veratrum viride is one of the best of remedies. Thoroughly unloading the stomach and portal circulation, controlling the circulation, preventing the tongue from becoming dry and parched. I feel sure, also, that in many cases it has shortened the course of the disease. Patients eat well while taking veratrum viride. The doses in these cases must be small, one drop of Norwood's tincture every four hours being often sufficient.

In puerperal convulsions it is a most efficient remedy, but must be given in very large doses, the uræmic condition producing tolerance of its effects. A patient in puerperal convulsions can safely take from thirty to sixty drops of the fluid extract. I have not been obliged to repeat the dose in such cases, nor has vomiting occurred.

In membranous croup it is the remedy; but must be given for effect, not in ordinary

doses. I have given a child two-and-a-half years old, twenty drops of the fluid extract inside of six hours, with the best results. It is worse than useless in diphtheria, scarlatina, and pyæmia.

I have used it in small-pox, bringing the patient under its influence in the initial fever, and not allowing the pulse to rise above sixty beats per minute during the course of the disease. In this case no delirium occurred, nor any secondary fever, and when the crusts dropped off no pitting of the skin was left. Dr. Maxwell, of Davenport, now dead, confirmed my experience, after ample opportunity to test it in the army pest-houses during the war. He also claimed that, if the drug was administered during the course of vaccination, no scar would be left.

The only unpleasant symptoms, which I have witnessed in the use of veratrum viride, have been nausea and vomiting, and according to Prof. H. C. Wood (*Amer. Journ. Med. Science*, vol. 49, p. 30), they can be entirely avoided by separating the alkaloid containing the sedative principle from that of the emetic, as was done by Mr. Chas. Bullock, of Philadelphia, with the article experimented on by Prof. Wood.

I have been trying for the last fifteen years to get some pharmacist to prepare and put the viridæ sulphas upon the market. It certainly would be extensively used, especially by the practitioners of the west.

In conclusion, I would say that, if I had to rely upon four articles for an armamentarium, they would be quinine, calomel, opium, and viratrum viride.

A CASE OF GANGRENE OF THE LUNG COMPLICATING CROUPOUS PNEUMONIA.

BY THEODORE DILLER, M.D.,
LANCASTER, PA.,

Member Lancaster County Medical Society, formerly
one of the House Physicians to Phila. Hospital.

Charles Manlove, colored, age 35, was brought to the hospital in an ambulance, June 6, 1887. He was taken from one of the lowest dens in St. Mary street, where he was found in a condition of squalor and filth. The following history was obtained: He had had the ordinary diseases of childhood and typhoid fever, and for many years had been a very hard drinker; but had considered himself a healthy man, and had worked up to May 24, 1887, on which day he was seized with

a severe pain in his left chest from the nipple downwards. He said he felt very feverish about this time, and expectorated a considerable amount of tenacious, viscid material, which at first was brownish in color, latterly, yellowish white. His sleep was very irregular, and he complained of sweating a great deal during sleep. Up to this time (June 6, thirteen days after the initial chill), he had had no medical attendant, and indeed very little attention of any kind. After being placed in a medical ward, a physical examination was made by Dr. Bruen and me, which showed the resonance over the right chest to be impaired from the fourth rib downwards, and the tactile fremitus correspondingly increased. Over this area of impaired resonance numerous râles were heard and some blowing breathing. The same physical signs were elicited over a corresponding posterior area.

Anteriorly, just below the clavicle (on the right side), the presence of a considerable sized cavity was discovered, by means of the ordinary physical signs. The patient's breathing was hurried, his pulse quick, but lacking in force, and there was a peculiar *pinched* appearance about the face. His breath was exceedingly fetid; so much so that the other patients in the ward complained bitterly of it. I was forced on this account to isolate him. His treatment was a stimulating and supporting one, consisting of amm. carb., tr. digitalis and whiskey—the last was given very largely, while nourishment was given at short intervals in a concentrated and easily digested form. A spray of carbolic acid solution (1 to 60) was used as a local application by means of an atomizer, with the view of rendering his breath less offensive. This measure was in a large degree efficacious. Patient died June 11th.

An autopsy was made, twenty-six hours after death, by Dr. H. F. Formad, assisted by me. The following notes were taken: Body that of a colored man of medium height, considerably emaciated. Heart normal. *Pleura on right side* very adherent, from the apex to the fifth rib.

Right lung crepitant at the extreme apex, the remainder of the upper lobe being in a state of gray hepatization. The two lower lobes are in a state of red hepatization passing into the gray. In the upper lobe there is a cavity about the size of an orange, situated anteriorly and just below the pleura, but in no place perforating it. The walls of the cavity are very ragged and irregular, while there is surrounding the cavity a hard, indurated mass of gray material. Several

good sized vessels are seen crossing the cavity. The odor emitted is horribly offensive, and there is a blackish, semi-fluid material contained in it.

Left lung crepitant throughout, except at the base, which is in a state of hypostatic congestion.

Other organs not examined.

SOCIETY REPORTS.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, October 26, 1887.

The President, J. Solis Cohen, M.D., in the Chair. The discussion on Dr. Parvin's paper¹ on

Injuries to the Fœtus During Labor

was opened by Dr. W. T. LUSK, of New York, who said: Dr. Parvin, in his exhaustive *résumé* of the subject, has said that we should exercise charity toward those under whose care these accidents may happen. At the same time, I think we should, as scientific men, look upon this record as most humiliating, and should ask ourselves if we should exercise this charity toward ourselves as individuals, should these accidents fall to our lot.

I wish to avoid a repetition of the points which have been already so ably presented. In going over the subject there may, however, be found one or two matters which have been overlooked, or which it might be well to make more emphatic. In speaking of fractures of the skull occurring in spontaneous deliveries, cases which occurred many years ago have been given. In modern times reports of fractures in head-presentations terminating without the intervention of art are very rare. My attention has been called to one such case reported by Veit. The patient had received large doses of ergot. When the child was expelled it was found that the right parietal bone was separated from its fellow, from the occipital, and, to a great extent, from the frontal bone, and two fractures were found in the bone itself. It is a question, whether the cases of spontaneous fracture reported many years ago were due to the abuse of this certainly most unreliable drug?

I saw last summer a very interesting case of depression of the skull following a rather easy forceps delivery. I was sent for because

¹ See page 663.

the question had arisen between two practitioners as to the advisability of trephining the skull—introducing an instrument and elevating the depressed bone. I am not sure that this might not be good practice in some instances, but so far we have had no experience as regards results. We know that if the child shows no immediate symptoms from the depression, it is likely to thrive, and that in time the depression nearly or entirely disappears. In the case above referred to we decided to wait, the child has been thriving since, there is still a quadrilateral depression in the frontal region, which has not entirely disappeared. I was quite certain that the mother of this child had a contracted pelvis with projection of the promontory; but, in making an examination some three or four weeks after the birth of the child, to my surprise, found that the woman had a fairly roomy pelvis. The antero-posterior diameter measured at least three and three-fourths inches. The only conceivable cause of the depression was the blade of the forceps. This was to me certainly a novelty.

With reference to the amount of force which may be exerted on the neck of the child, I think that if we rely upon the experiments to which reference has been made, we are likely to be led into error. There is no doubt that the resistance of the neck under pressure varies greatly in different subjects. While the neck of one child will bear a weight of 160 pounds, the vertebrae of another will separate under a much less amount of tension. I do not believe that there are ever circumstances in which such an enormous pressure as 160 pounds should be exerted. If the after-coming head is retained by tonic retraction of the womb, such traction force must tear through the cervical tissues. If the head is retained by the brim of the pelvis, it is nearly certain that the child will be stillborn when the necessity for such an amount of force exists. It is a question whether we ever should use much force in pulling on the child? Whether, indeed, the head cannot better be shoved through the pelvis by suprapubic pressure, in the manner described by Dr. Goodell and Dr. Taylor.

There is one injury to the child which I do not think was particularly referred to by the author. He spoke of the dislocation of the occipital bone which sometimes occurs. In the case of a flattened pelvis, where the head enters in the transverse diameter, it will sometimes happen, where forceps are used, that the pressure of the blades bears directly upon the forehead and upon the occiput. This will be tolerated for a certain

length of time, but, when continued, the pressure ultimately affects the medulla oblongata. It is then difficult to get the child to breathe, the respiratory sense being destroyed, and often the child is born dead, as the result of such pressure. It is always well to be careful that, when the blades of the forceps cannot be applied to the sides of the head, they are applied in the oblique diameter.

With reference to fracture of the clavicle, it sometimes happens that this injury is due to direct pressure; more frequently, according to Ruge, it is due to the introduction of the hand into the vagina to bring down an extended arm. If the pelvis is small, the vagina rigid, and there is insufficient room for the hand, as the result of pressure upon the shoulder, the clavicle is apt to bend like a bow, and break in the middle.

In a well-conducted labor, the arms should not become extended above the head. In cases where this does take place, we know the directions that are given to draw on the elbow and push the arm over the face, but where the space is small you cannot always press the arm around the front of the face in the limited time required to extract the child alive. In these cases I think that we are justified in breaking the arm to accomplish delivery. Cases of true dislocation are probably exceedingly rare; at least we have no evidence of cases where the lesion has been demonstrated by dissection; but separation of the epiphysis closely resembles dislocation backward or forward, and, until dissections were made, dislocation was considered a common accident. There are one or two points in regard to separation of the epiphyses that are of interest. As a consequence of this fracture, Küstner has shown, that the cartilaginous portion of the bone is rotated outward by the action of the infra- and supra-spinatus and the teres minor muscles, while the shaft of the bone is rotated inward by the pectoral muscle, the latissimus dorsi, and the teres major. If the position of the arm is not rectified and union is allowed to take place, the movements of the arm will be more or less affected. Both external and internal rotation can then be accomplished only to a slight extent. Separation of the epiphyseal end of the humerus closely simulates paralysis, and some recent writers have gone so far as to assert that all cases of supposed paralysis of the arm are really cases of this injury. This is, however, not always the case. Last summer I attended an excitable primipara, who early in labor passed into a maniacal condition, which necessitated keeping her under an anæsthetic.

After the chloroform had been kept up for two or three hours, the cervix was partly dilated, and not wishing to continue the chloroform, for the immunity which attends its use in labor does not apply to its prolonged administration, I put on the forceps before dilatation was complete, and with considerable difficulty extracted the head through the cervix, the vagina, and through the vulva. The perineum did not tear, but the moment the head escaped, the vaginal orifice closed down tightly on the neck of the child, and I was compelled to introduce two fingers into each axilla to complete the delivery. After the birth one arm was found to be paralyzed. As I knew these have been recently asserted to be cases of epiphyseal separation, I examined the arm with great care, but failed to find the slightest evidence of fracture. There was no pain. There were no evidences of brain disturbance, although the pressure of the forceps had been continued for a long time. The galvanic current was applied to the arm, frictions were employed and it was kept warm, and in about ten weeks the child began to move its arm, though recovery is still far from complete.

To pass over the other points referred to, I should like to say a few words in regard to extraction in breech cases. It is nearly impossible where the arm has been bent behind the neck of the child to extract the arm without fracture. Then why not fracture the arm? Is the physician responsible if this accident occurs as the result of efforts to release the member? I should say, no, but he is responsible for the displacement of the arm behind the head. If he lets the body alone and does not twist the trunk, the arm will not remain extended. The child does not spontaneously flex its arm and place the forearm underneath the occiput.

There is a case recently reported by Englebach which I would add to the list of accidents. In this case the child was born with an enormous swelling of the scrotum, due to an effusion of blood into the tunica vaginalis of each side.

I have taken some interest in the questions connected with the extraction of the breech when both extremities were reflected upward, and I wish to reiterate what I said two or three years ago with reference to the use of forceps to the breech. In a recent brochure, Küstner condemns this method, but confesses to have never tried it. We all know that in the exercise of the usual method, a person with strong fingers is capable of exerting a great deal of force which bears to a great extent on the sacro-iliac synchondrosis,

and under these circumstances rupture of the sacro-iliac joint is likely to take place—a rupture which may be followed in after life by the development of the Nægeli deformity. I think that the application of the forceps to the breech is easier than a person who has not tried it would suppose. I speak of cases where the breech has reached the floor of the pelvis. Here it is not necessary to use a great deal of force. If the breech is brought down to the perineum and then allowed to recede, and this is continued until physiological softening of the pelvic floor and perineum takes place, a very moderate degree of force is required. I think that the use of the forceps under these circumstances is attended with less risk to the child than the employment of the finger or the blunt hook. I have succeeded with the forceps in three cases where the fingers had been used in vain.

I do not feel like occupying any more of the time of the Society. I would say, in conclusion, that this is a subject to which too much attention cannot be given, for woman after passing through the discomforts of the period of gestation, and the perils of labor, is entitled to the only reward that it is possible to give her, that of having a living child, sound in body and limb; and anything that will contribute toward the prevention of such a record as we have heard to-night is certainly worthy of the attention of any body of scientific men. At the present time the public hold us responsible if we allow a patient to die of puerperal fever. It would probably intensify our interest in the subject if the public were to take a similar position with reference to dead and injured children.

DR. E. WILSON said: I have been much interested in, and instructed by, the paper of the evening. I was glad to hear the last speaker condemn the use of great force in the delivery of the child by forceps, or by traction in cases of breech presentation. With reference to the application of the forceps to the breech, I can only say that I have participated in but one case where such application was made. This was a case of first labor, and the physician had applied the forceps to the breech on the supposition that it was the head. As the labor was progressing satisfactorily and safely, cautious traction was made with the forceps, and the labor terminated without injury to the mother of the child.

DR. H. LEAMAN said: I think that the presentation of this subject has been opportune. I believe that we are entering upon

a new period with reference to the subject of labor. The careful studies of gynecologists have forced upon obstetricians the careful use of instruments.

Some of the injuries referred to to-night I have seen. In my early practice I was unfortunate enough to fracture the inferior maxilla, but that has been the only case in a practice of twenty years. I have seen the clavicle broken, and I have seen paralysis. I recently had a case of facial paralysis, which was due to the fact that the sacrum was greatly curved, the coccyx being movable. The presentation was vertex left front, but the head was held from complete rotation by the deep curvature of the sacrum. This was overcome without difficulty by the application of the forceps. The instrument was then removed, and the labor allowed to proceed. The caput succedaneum was on the right parietal region, while the paralysis was on the left side. This passed off in the course of six weeks.

The injuries referred to are rare, and I believe have been necessary in the course of events. It is to be hoped that they may in great measure be prevented in the future. There is one injury not mentioned, which I am satisfied exists to a greater extent than any already referred to. I believe that too much haste in delivery, and in tying the cord, often causes non-closure of the foramen ovale. I have made a number of post-mortems in the case of children, and I have found the foramen ovale open too frequently. Many of the nutritive diseases of childhood are doubtless due to malnutrition resulting from a persistent foramen ovale.

DR. WHARTON SINKLER said: A very large proportion of the cases of paralysis, that I have met with in infants, have followed instrumental or prolonged and difficult labors. The most frequent form that we meet with is facial paralysis, either unilaterel or bilateral. This generally results from the pressure of the forceps upon the facial nerve or upon the mastoid process. Facial paralysis may, however, result simply from the impaction of the child's head in the pelvis without the use of the forceps.

Hemiplegias are often met with in the newly born as a result of the use of the forceps. A few days ago I saw a child with right hemiplegia, and the mother stated that the child had been delivered by forceps, and that immediately after birth there was a deep depression behind the left ear. I found upon examination of this child, who was now sixteen months old, that a depression still existed in the left mastoid process. There was

right hemiplegia present. The right leg was spastic and the movements of the arm limited and incoördinate. Spastic paralysis, and what is sometimes called double spastic hemiplegia, very frequently occur in children who have been born by the breech. These conditions generally persist during life and are associated with a feeble condition of the intellect.

Professor Parvin has referred to injuries to the sterno-cleido-mastoid muscle. I have seen cases where the child has lost power in all the muscles of the neck, so that it was unable to support the head. Some of the cases have been delivered by the breech and considerable traction made. Some have followed delivery by forceps, perhaps from pressure on the spinal accessory nerve, or perhaps from extravasation of blood. In the case of paralysis following difficult or instrumental labors, the lesion is often an extravasation of blood over the motor convolutions, a meningeal hemorrhage. If the amount of the extravasation is great, the prognosis is, of course, bad, but in some of the cases, especially where there is monoplegia, where there is paralysis of one arm alone, the child entirely recovers the use of the limb; and in facial paralysis recovery, as a rule, occurs in a few days, but the condition may persist during life.

DR. C. B. NANCREDE said: I believe the treatment of the injuries of the soft parts is too often left to the nurse, who either does nothing, or does that which ought not to be done. It has been recently shown that even the slightest injury of the scalp may end in periostitis, inflammation of the sinuses, meningitis, encephalitis, and often pyemia. The prompt carrying out of antiseptic precautions greatly reduces the mortality from such injuries. Although in these cases certain forms of antiseptic dressing may be impossible, the principle of antiseptics is easily carried out in many ways. Here, of course, the Lister dressing, or the application of any irritant or poisonous substance, is out of the question. But we may use boric acid freely, and it has the especial advantage of being a dry dressing.

Depression of portions of the bones of the skull, without fracture, is readily understood when we study the anatomy of the bones usually broken, viz., the parietal, frontal, occipital, and squamous plate of the temporal. Ossification proceeds from the centre in ray-like projections of bony fibre which, near the free edges of the bone, readily admit of various new relations to one another, without actual rupture of the osseous fibres.

I believe, however, that fractures are more common than is generally supposed; but that they are not noted, because the break is usually a simple fissure, or because it is concealed by a marked "caput" or cephalhæmatoma, since such injuries are usually met with after hard or instrumental labors. I would call attention to the fact that simple fracture of the skull is in itself of no consequence. The injuries to be feared are those done at the same time to the subjacent tissues by the force which produces the fracture. If I should ever see a case in which I was convinced that existing paralysis was due to depression, I might trephine. The recently published statistics, that seem to indicate that trephining under antiseptic precautions is entirely without danger, are not to be relied on, and, while I am a thorough believer in antisepsis, I must call attention to the fact that as inflammation of the membranes or brain may occur from injury without any break of the cutaneous surface whatever, you certainly may have the same after, and because of trephining, despite antisepsis. Trephining cannot remove many of the conditions referred to by Dr. Sinkler, which are the real sources of danger, such as effusion of blood upon the surface of the brain or in the arachnoid. Fractures producing epileptic seizures, etc., later in life, are rough fractures where projecting spiculæ or rough edges impinge on the brain or membranes; and such fractures—except perhaps, *very rarely*, projecting rough edges—cannot occur in the infant skull; which is *devoid* of an internal table, from the shattering of which, in fractures in adults, secondary nerve trouble results. In the skull at birth, the articular eminence, which keeps a dislocated adult jaw from returning to its normal position, is practically absent; so that a dislocation of the jaw cannot be produced unless the force is sufficient to tear the soft tissues surrounding the articulation, giving rise to a compound dislocation. If the force applied is less than this, as soon as its application is suspended, the jaw returns to its normal position.

I believe that fracture of the long bones during labor is not very common, but that separation of their epiphyses is, for their union with the shaft is effected at this time only by the periosteum and soft cartilage. It has been shown that a few pounds weight exerting cross-strain will cause the separation, while six times the weight applied by direct traction will produce no injury. I do not believe that the injuries reported as dislocations were dislocations; but think they

were separations of the neighboring epiphyses or pathological displacements. Any one who is accustomed to dissect the body of the newborn child knows how readily such separations are produced. No one has ever been able to produce a luxation in an infant's cadaver, because of this ease of separation of the epiphyses. Dr. Lusk has described a case of separation of the upper epiphysis of the humerus, which produced a peculiar displacement. Probably in this case all the epiphyses of the proximal end were together separated from the shaft. I would advise in the reduction of a similar case, the method proposed by Dr. Moore, of Rochester. In the treatment of fractures of the foetal humerus, a friend of mine has had good success by fixing the whole upper extremity with a moulded splint in a straight position. Fractures of the femur are more difficult to manage. Here sheet vulcanite which can, by softening in hot water, be accurately moulded to the limb, had better be used, because it will absorb neither urine nor fæces. An anterior splint should be made which will extend well up over the abdomen, and a posterior splint to reach from the buttock well below the knee, thus fulfilling the important indication of fixing the joints above and below the fracture. It only requires ten or twelve days for firm union to occur.

In speaking of torticollis the sterno-cleido-mastoid muscle has alone been referred to. It is possible that in some cases this is the only muscle at fault, but in most instances several other muscles, as the trapezius and scaleni are involved. I have seen instances of injuries to this muscle in the newly born, but have never traced the cases in later life. Again, in a recently treated case of so-called congenital wry-neck, absolutely no history of injury during labor could be elicited.

Dr. W. GOODELL said: I present for inspection this evening a specimen of firmly united fracture of an infant's humerus, of which I am not ashamed, but rather proud; for by the fracture I saved the child's life. It was a case of breech presentation, where the heart's action was failing and the ominous convulsive movements of the child were giving out, which indicates the near approach of death. The arm was up alongside the child's head, and if I had had more time, I could have brought it down without injury; but every second was precious. So I snapped the arm, and quickly delivered a living child. It died a few months afterward of cholera infantum, and the mother, knowing my interest in the case, allowed me to obtain the specimen. I have

reported elsewhere a unique case, where fracture was produced by the maternal forces. The vertex presented, the pains were strong, the passages ample; but the head did not descend. Suddenly, during a very severe pain, a hand shut out of the anus, without tearing the perineum. While I was gazing on in amazement, another pain suddenly took place. There was an audible snap, the hand as quickly disappeared from the anus, and the child was born with a fracture of the clavicle. The rent in the vagina was sewed up, and the fracture dressed with adhesive strips. The vaginal wound healed up perfectly, and the child recovered without deformity. This remarkable accident I attribute to the arm being thrown across the nucha. The protruding hand perforated the vagina, and was button-holed there. Then the advancing body forcibly dragged the arm down the back of the child, and the clavicle was fractured by the twist or strain it sustained.

In a case seen with my friend, Dr. James F. Wilson, fracture of the clavicle, and of the skull also, occurred. It was an exceedingly difficult case. She was delivered in her first labor by craniotomy, by Dr. Wilson, in conjunction with the late Dr. Parry. In this, her second labor, after using the forceps ineffectually, we turned, and delivered in a very few minutes, by vigorous traction and by very great pressure from above. The fractures were caused by the projection of the sacro-iliac promontory. The child recovered perfectly.

I have repeatedly seen facial paralysis; but in instrumental labors it has occurred only when the blades of the forceps were not applied exactly to the sides of the child's head. Dr. Parvin speaks of the child living a few hours after the performance of craniotomy. It was to such an occurrence that we owe the travels of Mungo Park, who was a physician, but who, early in his professional career, was so disgusted by this accident that he gave up practice. In his case the infant lived to manhood. With regard to head-last labors, I have tried to deliver the breech by the use of the forceps on the buttocks, and have succeeded with them, but they are liable to slip off. I therefore always bring a leg down in breech cases, and then I have command of the situation. The force of traction which the neck will bear is uncertain, and doubtless varies greatly; but I believe that the man who, in trying to save the child, breaks the most necks, saves the most children, and I respect him accordingly. Such labors are al-

ways very dangerous to the child; the percentage of deaths is a very large one. I look on a child in breech presentation as a child drowning, to which help must be sped—help at all hazards. It is emphatically a case of "neck or nothing," and we must not sacrifice the life of the child to any sentimental considerations about breaking its neck.

One point that perhaps does not come strictly under injuries to the foetus, but may be considered here, since it causes the death of the foetus, is pressure on the cord, prolapsed or wound round the neck, by one of the blades of the forceps, and especially by the occipital one, when the blades are not applied exactly to the sides of the head. I am sure this has occurred at my hands. An annoyance in cases of face presentation is the subsequent unnatural position of the child, which for days will lie with its head greatly extended, though it ultimately takes the natural position.

DR. D. LONGAKER said: I wish to speak of injuries to the soft parts of the head, from application of the forceps and pelvic deformities. I have reported a case where, after premature delivery with the Tarnier forceps, through a rachitic pelvis with a conjugate diameter of three inches, there was a rather clean-cut contused wound in the left anterior parietal region, which I am morally certain was not made by the extremities of the forceps, but occurred when the head suddenly slipped through the narrowed conjugate diameter. Then there are wounds caused by faulty construction of the forceps, particularly an excessive cephalic curve, which brings the distal extremity of the blades into close apposition. I have seen one cut, and several severe bruises, produced in this way. A peculiar parchment-like condition of the bones of the foetal head is sometimes observed, especially of the parietal bones; and I have seen it so marked that I was able to diagnose it through the abdominal walls, but have never known it to lead to fracture. Fracture of the long bones has only occurred in my experience where the difficulties to delivery of a living child have been insurmountable. I have seen one case of separation of the epiphyses of the humerus, in a very large child, which was dead when delivered; and I have had one fracture of the femur from the application of the fillet, this being also a difficult delivery of a dead child. I fully agree with Dr. Leaman as to the injury of tying the cord too soon. The researches of Budin have fully shown this. I think we ought to lay

down the definite rule, that the cord should never be tied until flabby, pale and pulseless. It has happened to me also to compress a loop of the cord in the application of the forceps. I am glad to learn that Dr. Goodell succeeds in converting face into vertex presentations, by introduction of the hand; but if we fail in this we have produced an early rupture of the membranes with all its undesirable effects. For this reason the method of Schatz, of Rostock, is to be preferred.

DR. H. C. WOOD said: It has been eleven years since I attended a case of obstetrics, for which I trust I am duly thankful; and I should not presume to take part in this discussion had not the remarks of the last speaker been so entirely contrary to my own experience. We do not see hemiplegias and paraplegias due to injury during labor, in children of five or six years, simply because children so injured never live that long. What we do see are the cases of spastic paralysis. Spastic paralysis is the secondary effect of an earlier destructive lesion, the immediate evidence of which may have been entirely overlooked. In all such cases presenting at my clinic I inquire as to the history of the labor; and invariably find that it has been unusually severe or instrumental. The brain at birth is so soft, so liable to injury, that while I would not have the obstetrician entirely discard the use of the forceps, I think he should never take them in his hand without bearing in mind the possibility that they may do serious permanent injury to the nerve centres of the child.

DR. W. H. PARISH said: Though Dr. Wood is no obstetrician, he talks like a very sensible one. I believe the forceps in proper hands save the lives of many children; but where improperly used they sacrifice not infrequently the child's life and often lead to subsequent harm. Their application at the superior strait is, under some conditions, exceedingly dangerous to the child.

Last year I saw a laceration of the child's perineum, extending from the vulvar orifice clear through to the rectum, produced evidently by the tip of one blade of the forceps, which the practitioner had attempted to apply to an unrecognized breech presentation.

I recall the case of a robust Irish woman at the Blockley Hospital, who had borne five or six healthy children. Labor was delayed, and ergot was freely and, of course, improperly given in my absence, until the contractions came on with unusual force. The child was speedily delivered, but died in a few minutes. At the autopsy I found that the

principal lesion was a separation of the lateral, or articular, segment of the occipital bone, which was pressed in upon the medulla; doubtless by the excessive contractions produced by ergot. Recently, a friend of mine saw in consultation a child, which, having presented by the breech and the scrotum become considerably distended from cedema; the medical attendant, mistaking the scrotum for the bag of waters, had cut it open and cut into the testicle.

DR. J. PRICE said: I desire to call attention to the fact that the "Simpson forceps" probably makes less compression of the head than any other form in use. As to the frequency of separation of the head and trunk, by contraction in head-last labors, I might say that I knew of two cases in which it has occurred this summer, in this city. In one the patient died after Cæsarean section for the removal of the head; and the other died and was buried with the head still in the cavity of the uterus.

DR. J. L. LUDLOW said: When I was a student, Dr. Hodge taught us to apply the forceps only after careful deliberation and consultation. Since then the forceps have come into more general use; and there are certain practitioners, who, if labor does not terminate in a certain set time, will always apply them, and who thus get a reputation for quick delivery, and draw patients. The obstetrician needs a great deal of patience, and great injury is often done by want of it.

DR. PARVIN, in closing the discussion, said: The reason obstetric paraplegia is not seen at six or seven years is that such paraplegia is caused by rupture of the spinal cord connected with fracture of some portion of the vertebral column, and death follows very quickly, usually within a very few hours.

As to the treatment of fractures of the femur in the newborn, I regret that a gentleman present did not narrate a case of such injury to which several practitioners were called. Their first effort was to extend the limb completely, in order to treat the fracture somewhat after the manner of treatment in the adult; but finding their efforts vain, it suddenly flashed upon the minds of the surgeons and obstetricians that an infant did not have its lower limbs extended, and they resorted to a more rational method of keeping the ends of the broken bone in contact, and it was completely successful.

I am not prepared to admit that dislocations of the humerus or femur cannot occur in labor, because reputable observers claim to have seen them, though, of course, they are quite rare.

I cannot help regretting that some time has not been given to the discussion of what is the best method of delivery of the head, especially in pelvic presentation, or after podalic version. Is there not a better way to bring the head through a narrowed pelvic inlet than the great traction upon the body which has been recommended? It seems to

be impossible to make that traction directly in the axis of the inlet, and hence much of it is lost, and therefore useless or injurious, force.

Finally, the relation between protracted labor and forceps' delivery, and remote disorders of the nervous system, and especially with idiocy, probably has not elicited that consideration its importance demands.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Treatment of Sea-Sickness.

Dr. W. W. Skinner, who says that he has investigated sea-sickness in the course of several long voyages in 1886, as ship's surgeon, recommends the following treatment as at once simple and efficacious:

The medicinal substances employed are atropine, strychnine and caffeine; the two former are administered simultaneously, the latter alone. Sea-sickness may be cured either by atropine associated with strychnine or by caffeine held in concentrated solution by salicylate or benzoate of sodium. These substances are all administered hypodermically. This mode of administration was chosen for the following reasons: The frequent vomiting in naupathia, by which the agents employed would be lost; the difficulty of their absorption from the stomach in this affection; and also the retaining and destructive action of the liver upon these alkaloids when absorbed from the gastrointestinal tract (Heger, Schiff, Lautenbach, and others).

The dose of atropine and strychnine for adults is 1-60 grain of each. It would, perhaps, be better to give a little less of atropine and the double or triple of strychnine. In warm climates the solution must be frequently renewed. Although these substances have been employed a great many times for sea-sickness during the last eighteen months, no injurious effect therefrom has been observed. If after two hours the patient is not cured, a second injection may be given, but it would be imprudent to repeat this dose of atropine too frequently.

Children and adolescents are very susceptible to this medication. A girl, aged $2\frac{1}{2}$, sick during fourteen hours, was promptly cured by the injection of one-sixth of a gramme of the solution, that is, by about $\frac{1}{16}$ of a grain of atropine and as much of strychnine. A boy, aged 6, was cured by $\frac{1}{16}$ of a grain of each.

In the majority of cases of simple naupathia, the patients cease vomiting immediately after receiving a single injection. A little later they feel no more nausea, headache, nor vertigo. Almost always they fall asleep shortly after receiving the injection, and remain sleeping for half or three-quarters of an hour. If given late in the evening, the injection ensures a refreshing night's rest.

The following is the formula employed in administering caffeine to adults: Caffeine, gr. lx; sodii salicyl., gr. xlv; aq. destill., q. s. ad., f3iii. Dissolve by gentle heating. Every 20 minims contains about 6 grains of caffeine. A single hypodermic injection of four grains of caffeine completely cured in seven hours a patient who had been suffering intensely from sea-sickness during three days. Another patient was cured in five hours.

Certain disadvantages of the method exist, but are not of great importance. Dryness of the throat is sometimes caused by the atropine, and young children may present an intense redness of the skin; amblyopia caused by this alkaloid is occasionally observed in adults. Exceptionally, the seat of the injection remains somewhat painful, especially in lean individuals; and once in my experience troublesome inflammatory symptoms were caused by an injection under the skin of the outer border of the forearm, which, however, spontaneously subsided in the course of two days.

If this method produces no favorable effect upon a given person affected with naupathia who has not exceeded the age of adult life, it is almost certain that the failure is due to an organic lesion in some part of the circulatory apparatus, especially in the valves of the heart. For example, a patient having well marked mitral insufficiency received in the space of six hours three injections, each containing 1-60 of a grain of atropine and 1-60 of a grain of strychnine, without the slightest favorable result, the

only change in the symptoms being an increase in the number (but not in the force) of the cardiac pulsations. It is well to remark that, if these injections produced no amelioration in this case, they did not, on the other hand, occasion any aggravation.

The two alkaloids exhibited in the form of pills, however, have successfully warded off sea-sickness, when taken immediately upon feeling the first approaches of nausea.

The Frequency of Malignant Tumors of the Ovary and their Treatment.

Prof. Leopold, of Dresden, in an article in the *Deutsche med. Wochensch.*, November 4, 1887, says that he has removed twenty-six malignant tumors of the ovary in one hundred and sixteen ovariectomies, and therefore in 22.6 per cent. of all the cases. This percentage exceeds somewhat that obtained by Cohen from Schroeder's material. According to Cohen's statistics, Schroeder had, in six hundred ovariectomies, operated one hundred times for malignant tumors, or in 16.6 per cent. of the cases.

Leopold's twenty-six cases of malignant tumor of the ovary were divided as follows: Papillary cysts, 5 (three monolateral, two bilateral); carcinomatous cysts, 11 (six monolateral, five bilateral); solid sarcomas, 4 (two monolateral, two bilateral); the remaining six cases were those in which a preliminary incision showed that a radical operation was impossible. Of his 110 complete ovariectomies, four died of septic infection (3.6 per cent.); of the 26 cases of malignant tumor, five died as a result of the operation (19.1 per cent.). Of the 20 cases in which a radical operation was still possible, four died as a result of the operation (20 per cent.).

Of the 16 remaining cases, three are to be excluded because they are of too recent a date to enable one to say positively whether they are cured or not. Of the remaining thirteen which have been operated on above a year, nine have had relapses within from a month to a year; four, on the other hand, are, up to the present time, regarded as cured. Therefore, 20 per cent. of all cases operated on for malignant tumor of the ovary, have been entirely well for over a year. This result entirely agrees with Schroeder's.

Leopold concludes that the sooner the diagnosis is made and the ovaries removed, the better will be the prognosis. He also thinks that the smaller tumors of the ovaries are to be removed as soon as they begin to enlarge, especially if they are bilateral.

Every proliferating tumor of the ovary is to be removed immediately.—*Deutsche medizinische Zeitung*, September 29, 1887.

Acute Rheumatic Peritonitis.

Dr. William Robinson contributes the following instance of this rare affection to the *British Medical Journal*, Oct. 15, 1887:

M. E. G., 17 years old, tall, slender, and a twin, was seized with severe abdominal pain and vomiting on January 3d, 1887. On January 15th, Dr. Robinson was called to see her, when he found her in bed, lying on her back, with knees drawn up; severe pain in her abdomen, increased by pressure, and excessive tenderness, especially of the hypogastric region; pulse, 110, weak; temperature, 99.4° F.,—in fact, all the symptoms of acute peritonitis. A normal menstruation had ceased five days before the attack; there were no signs of renal or pelvic disease; and the only history bearing on the case was that the patient had, two days before the attack, walked two miles in the severely cold night air. The usual instructions as to diet, rest in bed, external applications, and avoidance of aperients (which had been given by her mother at the onset) were given, and a mixture, containing opium, prescribed. During the first week the pain was kept in subjection by the opium, but the pulse remained frequent, the temperature rose to 102°-103°, and the inflammation extended to the whole of the peritoneum. The tongue was dry, red, small and characteristic, and the breathing altogether costal. At the end of the first week severe pain paralyzed the right knee, which became very tender, but not red or swollen; the temperature rose to 104°, signs of pericarditis developed, and sour-smelling acid sweats set in. After two days the right knee became free from pain, but the left shoulder was attacked with acute pain, but without redness or swelling. In a few days more the left elbow followed suit. As the pericarditis developed, the abdominal symptoms subsided gradually, but dulness, loss of voice resonance and breath sounds became marked at the bases of both lungs (double pleurisy with effusion). The respirations were short, and 34 per minute. At the end of the second week the heart dulness had greatly increased, and extended from one-half an inch to the right of the sternum to half an inch to the left of the nipple, where the heart impulse was felt (on a level with the nipple); in the second left intercostal space a well-marked friction fre-

Hypertension

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mitus and sound were preceptible during the whole time the pericarditis lasted, and here also an easily seen wave-like motion was visible, due to and synchronous with each cardiac systole (that this wave-like movement was not due to fluid effusion was clearly proved by the friction sound being audible only over the same area). On endeavoring one day to examine more in detail the back of the chest, the patient was quietly raised a little from the previously carefully maintained dorsal position, when hiccoughing, "catching of the breath," and fatal syncope almost occurred, and was only warded off by the speedy restoration to her former position, and by stimulants. From this time up to the fifth week gradual improvement took place; the patient was able to sit up in bed; the abdominal tenderness, tympanites, and increased heart dulness had almost gone, and the temperature and pulse had become normal, when, presumably from a slight error in diet, a relapse of the peritonitis occurred, and the pain returned for a time to her left shoulder; but she again gradually recovered, and by the third week in March she could take an ordinary diet with impunity, walk out of doors, and had no shortness of breath. The heart dulness and apex beat were almost normal, but a systolic *bruit* remained. In April she was continuing to regain flesh and strength.

There can be little doubt but that this case was one of acute rheumatism, in which the visceral affections eclipsed those of the joints. The only other view that could be advanced is that the peritonitis was "idiopathic," and that the pleuræ and pericardium were affected through the lymph channels existing between those serous membranes and the diaphragm. There were never any signs of typhoid fever, and tubercle was out of the question. Paracentesis pericardii was not performed, because (1) the symptoms were never sufficiently alarming, (2) the effusion was regarded as rheumatic, and (3) the fluid gradually became absorbed.

Hypertrophic Cirrhosis of the Liver Cured by Calomel.

Dr. Schnepf, of Vienna, states in the *Wien. med. Blätt.*, No. 14, 1887, that he had as a patient a woman, twenty-eight years old, who presented marked symptoms of cirrhosis of the liver. The liver, as demonstrated by percussion, was considerably enlarged. After a sojourn of five weeks at Carlsbad had resulted in no benefit, and brisk purgatives followed by opiates had

effected only a slight improvement, at the suggestion of Prof. Nothnagel, the patient was put upon an absolute milk diet, and given calomel three times daily, in doses of $\frac{3}{4}$ of a grain. On the second day the fæces became yellowish, and the urine clear. After some weeks jaundice and acites disappeared, the liver became smaller and the menses reappeared. At the end of three months the patient had taken one hundred doses of calomel and was completely cured. Pain, enlargement of the liver, ascites, caput medusæ, were no longer present.—*Deutsche Medizinal-Zeitung*, September 29, 1887.

Treatment of Chronic Constipation by Electricity.

Leubuscher (*Centralblatt f. klin. Med.*, 1887, No. 25) has found electrical treatment useful in chronic constipation connected with nervous disturbances, chronic cerebral and spinal diseases, and in cases in which the fæces were hard and dry. Hitherto the faradaic current has been for the most part used in constipation, but Leubuscher finds the galvanic current more efficacious. He passes an electrode connected with the cathode into the rectum, and applies the anode to the abdominal walls in the course of the large intestine. He does not mention the number of cells he employs, but says he used a current which, without causing pain, could be distinctly felt. Each application lasted 10-15 minutes. Although Leubuscher claims that his treatment is successful, his statistics seem only to indicate that galvanic treatment may at times be used with advantage when other means have failed. Out of fifteen cases four were cured, in nine constipation was temporarily relieved, but returned shortly after the electrical treatment ceased, and in two no good results followed. The treatment should be carried out for three to five weeks daily. The first three or four applications are generally without apparent effect, and for some time the action of the bowels does not occur from five to twenty hours after the galvanic current has been employed, but gradually the interval is reduced to two or three hours, and the fæces become softer. Where constipation is connected with abnormal weakness of the abdominal walls or atrophy of the intestinal muscles, Leubuscher recommends massage; and he advises this method of treatment, too, in the constipation sometimes present in chronic heart and lung diseases, and after prolonged intestinal catarrh.—*Med. Chronicle*, September, 1887.

Intrauterine Fractures of the Tibia.

Heinrich Braun (*Arch. f. klin. Chir.*, xxxiv., S. 668) has carefully collected together twenty-seven cases in point, four of which he observed himself. He calls attention to the fact that as a rule these fractures occur in healthy individuals without other malformations, and that the lesion of the tibia actually occurs in the uterus through a break, or at least an infraction. To be sure, the injury is not always due to a force acting upon the body of the mother, but probably also arises through pressure of the uterus upon the yielding limbs of the foetus. Possibly in the latter cases there exists an association of the fracture with a defective development of the fibula, which lessens the resistance of the lower part of the thigh. These defects are of themselves rare; but in twenty-seven cases of congenital fracture of the tibia they were noticed sixteen times. A very frequent result of intrauterine fracture is shortening of the affected limb, which is not to be explained by fracture of the lower part of the thigh, or by previous ossification of the epiphyses, but must depend upon disturbances in the longitudinal growth of the tibia. The number of cases in which the retardation of the growth of the affected lower extremity could be followed up to a somewhat later period of life is, however, very small. As regards treatment, a greater interference than would be represented by a Keil osteotomy or by an osteoclasia, is only indicated in marked angularity of the tibia. In very moveable ankle joints, in which the foot is constantly rotated outwards, Braun has obtained artificial ankylosis of the ankle-joint in the position of equinus.—*Centralblatt f. d. med. Wissensch.*, August 27, 1887.

A Cause of Left-Handedness.

Dr. Feltz, of Saint-Denis, reports in *La France Médicale* the following observation, which seemed to him sufficiently trustworthy to put in evidence as one of the most frequent causes of left-handedness:

In a family composed of five persons, the father and mother are not left-handed, nor is the eldest of the children, who was raised by a nurse. The second child has been left-handed from its earliest years, and remains so; it is now five years old. The third child has been left-handed since it was a year old, when it was offered something and at once grasped it with the left hand. The mother herself had nursed the last two children, and was in the habit of carrying the child upon

her left arm. This she has done with both children who were left-handed. She was admonished to carry the child upon the right arm, and some months afterwards the child was found to have lost the habit of using its left hand, and became as right-handed as the eldest child.

Feltz explains this case by the fact that when a child is carried upon the left arm, it is also the left arm of the child that is in front of it, and is free to move and grasp objects; on the contrary, when the child is carried upon the right arm of the nurse, the right arm of the child is free to move. He adds, that in the families of the father and mother, and in the families of the grandparents, there are no left-handed people; and that in the second child, who continues left-handed, there are no blemishes, but it is perfectly well in all respects.—*Concours Médical*, September 24, 1887.

The Pneumococcus as a Cause of Meningitis.

Netter (*La Semaine Méd.*, No. 37, 1887), as the result of a number of observations, came to the conclusion that the pneumococcus may be the cause of simple meningitis, without a previous pneumonia; and that it may be the occasion of cerebro-spinal meningitis.—*Allg. med. Central-Zeitung*, Sept. 10, 1887.

Pilocarpine in Puerperal Convulsions.

Dr. Kirk (*Lancet*, August 13th, 1887), records two cases of puerperal convulsions treated by pilocarpine. The first was not of unusual severity. One-third of a grain of pilocarpine was injected and acted freely on the skin, but the patient died the same day after the birth of the child. The second case was complicated with purpura. One-third of a grain of pilocarpine was injected about half an hour previous to the expulsion of the child. Copious perspirations were produced, and the convulsions soon ceased. Dr. Kirk points out that the second case is no proof of the efficacy of pilocarpine, but the first is an instance of the failure of the drug in a case apparently well adapted for its use.—*Med. Chronicle*, Sept., 1887.

The Control of Hemorrhage.

Von Nussbaum finds peroxide of hydrogen of great value in controlling hemorrhage from the parenchyma of various organs, as well as from comparatively inaccessible vessels. The application is made with a pledget of cotton soaked in the peroxide.

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N. A. RANDOLPH, M. D.,
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INTERMARRIAGE OF THE DEAF.

Not long since, Prof. Graham Bell suggested that a law should be passed forbidding intermarriage among the deaf. The object of such a suggestion is, of course, to draw attention to the danger of multiplying the victims of a very sad affliction, by direct propagation. This object is a very commendable one; and yet it conflicts with the personal interest of the deaf already. It is not surprising, therefore, that Mr. Hiram Phelps Arms has followed it by a published protest, in which he argues that the deaf should not be forbidden to marry the deaf, because marriage with those who can hear is apt to lead to unhappiness. He contends that those who can hear will not marry the deaf, except for reasons which do not justify marriage at all. These reasons are such as a desire to acquire property, or greater or less timidity or effeminacy

on the part of the one who hears—if it be a man; and age, widowhood or the blight of divorce—if it be a woman. He states that at present from eighty to ninety-five per cent. of marriages among the deaf are intermarriages.

In a discussion of this sort there is much more involved than the personal wishes of the class under discussion. These deserve consideration; but the good of the community is of greater importance. And, if it could be shown that the children of deaf-mutes are often afflicted like their parents, and that the spread of this affliction is dangerous to the welfare of the community; then, there could be little doubt of the wisdom of considering some plan for restricting it. But, even the need of interference would not be one-thousandth part as urgent as it now is for the prevention of intermarriage among those with consumption, or scrofulous tendencies, or of extremely nervous disposition, or of drinking proclivities. What danger threatens from a few quiet, gentle, orderly, if voiceless, individuals, compared with that which advances unchallenged in a multitude of cachetic wretches, who love and marry—or marry without love—unwarned by those who know the bitter consequences which may befall them, or be entailed upon their unoffending offspring?

For the present then we would say: let the deaf marry as they will; and only when more dangerous classes have been attended to will we disturb them in their innocent retirement.

THE RESULT OF OPERATION FOR CANCER OF THE BREAST.

HILDEBRAND, *Deutsche Zeitschrift für Chirurgie*, Bd. xxv., gives some interesting statistics upon the results of removal of the breast for cancer, in the Göttingen clinic from 1875 to 1885. The whole number of cases operated upon was 152. In 137 the axilla was also cleaned out, often when no implication of the axillary glands was apparent; 11 times the breast alone was removed; and 4 times only the tumor was excised. The deaths from the operation numbered

11, that is, 7.2 per cent. The cause of death was either septicæmia, or pneumonia. From the latter cause 6 patients died.

As to the result: in 135 cases in which a radical operation was performed, recurrence took place 65 times—half of them within six months. Of the 135 cases, 23 were free from recurrence for at least three years; 30 for at least two years; and 53 for at least a year. Hildebrand calculates the absolute cures as about 33 per cent., and emphasizes the importance of early and thorough operation, upon which so much stress has been laid by Prof. S. W. Gross, of this city. An interesting feature of Hildebrand's study relates to the age and condition of the patients. He found the age of greatest frequency of cancer of the breast to be from the 45th to the 55th year; and that nearly 90 per cent. of the patients were married.

HEMORRHAGE FROM VARICOSE VEINS OF THE LABIUM IN PREGNANCY.

A rare but perplexing accident, which may happen during pregnancy or about the time of delivery, is the rupture of varicose veins of the genitals. A case of this sort occurred in Paris last July, and is described by Dr. T. LEGRY, in the *Progrès Médical*, October 22, 1887. The patient was a woman who, near the time of her confinement, inadvertently sat down upon the iron rail which separated two seats on the top of an omnibus. She soon felt that she was losing some fluid, but paid little attention to it until she began to be faint, and her neighbors noticed a pool of blood collecting at her feet. After some delay, she was removed, in an exsanguinated condition, to the Hôpital de la Charité, where she came under the care of Dr. Budin. The hemorrhage had now ceased; but the woman was almost dead. On careful examination, it was found that the bleeding had proceeded from a ruptured varicose vein in the left labium minus. Under appropriate treatment—restoratives and a compressing bandage—the woman revived, and passed safely through her confinement the next day.

This case illustrates the fact that a very grave hemorrhage may follow an accident to

an unrecognized varix. Legry mentions thirteen such occurrences, in nine of which the hemorrhage proved fatal. Such a hemorrhage is apt to be very rapid and very profuse. More than this, its cause is apt to be misunderstood. In most cases it is attributed to placenta previa, in which case the application of a tampon may happen to cause efficient compression upon the bleeding point, or it may not. In the latter case, or when the examiner, finding no physical evidence of placenta previa, and overlooking the real source of the bleeding, waits for clearer knowledge, the hemorrhage may go on until it brings about the death of the patient. Legry very properly suggests that the practical lesson to be learned from these facts is that, whenever a pregnant woman has a sudden and free hemorrhage, there should be no hesitation in making a thorough examination of the external genitals. Such an examination would lead to the discovery of the source of the hemorrhage in case it was a ruptured vein, and then the treatment would be simple and easy—the application of compressing forceps, or a suitable tampon, or even simple digital compression until the bleeding point was sealed with a clot.

THE MICROSCOPE IN MEDICINE.

The editor of the *American Monthly Microscopical Journal*, August, 1887, speaks of the importance of the microscope in the study of medicine, and urges the cultivation of microscopy in medical schools. As an illustration of the ignorance of what can be done with the microscope, he says:

"We were shocked one day not a year ago to receive a visit from a practitioner in a certain city. He showed us a small tumor on his left hand, and asked to have it viewed with a microscope to see if it were malignant. We expostulated against such defiance of the rules of procedure, but promised to examine it if it were removed and sent to our laboratory. It was accordingly removed, and, after several days, fell into our hands wrapped like a piece of meat from the butch-

er's. This same gentleman told us he had but little faith in the diagnosis of disease by the aid of the microscope."

This is, as Dr. Osborn admits, an extreme case; and yet there is no denying the fact that many medical men are much less familiar with microscopical work than they ought to be. In no regard is this state of affairs more to be regretted than in the matter of the diagnosis of affections of the kidneys. The usual method of examining the urine only for albumin and sugar is too incomplete for the status of medical science in these days. If a physician has no microscope, or cannot use one, he will miss many a case of kidney-disease, which he would detect if he were better provided or better informed. No doubt a man may be a very successful practitioner without using a microscope; but no doubt, also, he would be a better physician if he did use one. To do this; does not require the expenditure of much money, or any prolonged course of study; and it would be a decided gain in the direction of scientific precision if more medical men would buy an instrument of moderate cost, and use it frequently. Of course, the best way to learn to use the microscope is to have the help of a competent teacher; but all that is essential for ordinary practice can be learned from books; and any one, who will try it, will be astonished to find what he can accomplish in a little while in this fascinating and useful study.

EPILEPSY AND NYSTAGMUS.

At a meeting of the Société de Biologie, of Paris, held October 15, 1887, M. Charles Féré called attention to the frequency with which epileptics suffer with nystagmus, and mentioned a case in which the nystagmus was subject to marked exacerbations, and accompanied with well-marked sensations of vertigo. This fact recalls the observations of Dr. Stevens, in his book on "Functional Nervous Diseases," which we reviewed in the REPORTER, November 5, 1887, page 622, and in which so many nervous disorders—among them epilepsy—are associated with disorders of the eyes.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained, upon receipt of price, from the office of the REPORTER.]

A MANUAL OF ORGANIC MATERIA MEDICA. By JOHN M. MAISCH, Ph.D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. Third edition, with 250 illustrations. 8vo, pp. xvi, 532. Philadelphia: Lea Brothers & Co., 1887. Price, \$5.00.

This work has already met with so much favor that there is little to do, in noting the appearance of this third edition, besides saying that it is what one would expect from its talented author. The arrangement of the subjects is not alphabetical, but systematic, according to classes. The origin, habitat, description, constituents and properties of each drug are given in a clear and very succinct manner; and the whole book is full of valuable information. The work of the publishers is as creditable as that of the author; the paper, printing and binding being of the highest order of excellence; while the illustrations are superb.

DISEASES OF THE HEART. By DUJARDIN-BEAUMETZ, M.D., translated by E. P. HURD. Two volumes, paper. Square 16mo, pp. x, 316. Detroit: Geo. S. Davis, 1887. (The Physicians' Leisure Library, Nos. 2 and 4). Price, 25 cents each volume.

These two volumes constitute the most important parts of the series which Mr. Davis has been publishing this year at the cheap rate of twenty-five cents for each volume, appearing monthly. Those which we have already seen are two practical essays: one on the "Diagnosis and Treatment of Hæmorrhoids," by Dr. Kelsey, of New York, and one on "The Modern Treatment of Diarrhoea and Dysentery," by Dr. Palmer, of the University of Michigan.

The volume before us contains the teachings of one of the most eminent French clinical teachers of the present day, some of which have already been published in the columns of the REPORTER. They have been well translated by Dr. Hurd, who is a personal friend of the author. When the first volume of this series appeared, we felt that it was a serious drawback to their usefulness that they were printed in a color exceedingly trying to eyes not yet enfeebled by age. The second volume of Dujardin-Beaumetz's work, we are glad to say, appears in black, and is not open to this objection. The scientific merit of this work is very great, and it cannot fail to prove of value to careful students of the subject of which it treats.

NASAL POLYPUS, WITH NEURALGIA, HAY-FEVER AND ASTHMA IN RELATION TO ETHMOIDITIS. By EDWARD WOAKES, M.D., Lond, Senior Aural Surgeon and Lecturer on Diseases of the Ear at the London Hospital. Small 8vo, pp. xii, 140. Philadelphia: P. Blakiston, Son & Co., 1887. Price, \$1.25.

There is much food for thought in this brochure of Dr. Woakes, who has made a most thorough study of the subject of diseases of the ear, throat and nose, and who announces the opinion that nasal polypus, and other disturbances named in the title of his book, are dependent upon an inflammatory process in the ethmoid bone. He does not claim originality for this discovery; for he gives due credit to other workers who have arrived at analogous, if not identical, conclusions. But Dr. Woakes goes further than

any author with whose writings we are acquainted in attributing various local and reflex disturbances to an inflammation of the ethmoid bone, which he describes as first hypertrophic, and afterwards necrotic. The result of his studies leads him to the conviction that the proper treatment of these disorders is surgical: a conviction which seems to be pretty general now-a-days among students of nasal diseases.

We heartily commend this book to the notice of our readers. Its matter is good; its manner is interesting; and its mechanical execution is admirable.

TRANSACTIONS OF THE BROOKLYN PATHOLOGICAL SOCIETY. SESSION OF 1885-6. Large 8vo, pp. 233. New York: D. Appleton & Co., 1887. Edited by A. H. P. LEUF, M.D.

This handsomely printed volume of transactions indicates that the Brooklyn Pathological Society is a live organization; and the report of its transactions is both interesting and instructive reading, comprising not only descriptions of pathological specimens, and remarks suggested by them, but also elaborate papers upon subjects of general medical and surgical interest. One of the most interesting among these, is a paper by Dr. Robert G. Eccles, of Brooklyn, on "Some Serious Sources of Error in Studying the Course of Disease." In this paper, the author discusses the dangers which arise from the fact that medicines prescribed are so often different in character, or in strength, from what the physician expects. Druggists' errors, and even druggists' dishonesty, augment the variations which depend upon the want of acquaintance of physicians with the exact official strength of many drugs—especially since the adoption of the last Pharmacopoeia.

The editor contributes an interesting paper on "Surgical Infection and Antiseptics," in which he combats the prevailing belief in germicides.

If we were to criticise these excellent transactions, it would be in saying that we think some of the papers would have been much improved by being more condensed. In fact, we wonder at what hour this energetic Society could have adjourned some of its meetings!

LITERARY NOTES AND QUERIES.

[In this column the REPORTER will publish short items of literary interest and questions addressed to this Journal or its readers, and answers to them, in regard to any literary matters: books, authors, places and prices of publications, etc.]

—The first number of the *American Journal of Psychology* has just reached us. It is a handsomely printed and illustrated octavo of 206 pages, edited by G. Stanley Hall, Professor of Psychology and Pedagogics in the Johns Hopkins University, and published by N. Murray, of Baltimore, Md. The numbers are to appear quarterly. The first contains a prospectus in which the object of the *Journal* is stated to be to bring together the contributions of various departments of science bearing on psychology, which are now scattered; and gives promise of great usefulness. The price is to be \$3.00 a year; \$1.00 a number.

—The November number of *The Cosmopolitan* contains an interesting and rather remarkable article by Julian Hawthorne on "The Noble Art of Self-Defence," illustrated by M. J. Burns, which is likely

to attract attention, because of its advocacy of pugilism and the author's personal reminiscences of Heenan and Sayers.

—The Committee on Publication of the Franklin Institute has in contemplation the publication of a general index of authors and subject matter to the first 110 volumes of the proceedings of the Institute, from 1826 to 1880, provided they can procure a sufficient number of subscribers.

—Dr. L. H. C. writes: "THE REPORTER contains notice of a work by Heather Bigg, on "Artificial Limbs and the Amputations which afford the most appropriate Stumps," but fails to give the price of the work. I would like very much to have it, if not too expensive."

[We did not give the price, because we are not informed what it is. The book can probably be obtained by applying, with our notice, to any first-class book-seller. We think it would cost about \$2.00.—EDS. REPORTER.]

—A subscriber writes, offering to buy of us certain books, if we will allow a discount on the published prices.

[We offer to oblige any of our subscribers by purchasing and forwarding to them any book noticed in our columns on receipt of the published price. This is intended purely as a convenience to our subscribers. We have no idea of entering into competition with regular book dealers; and if any subscriber can get a book from them for less than the published price, we advise him to deal with them directly.—EDS. REPORTER.]

CORRESPONDENCE.

Nitrate of Potash as an Anti-Emetic.

EDS. MED. AND SURG. REPORTER:

Sirs:—I wish to call the attention of the profession to the value of nitrate of potash as a remedy for vomiting.

Nitrate of potash, properly administered, is one of the surest remedies we have for the relief of vomiting. I have been using it as an anti-emetic in my practice, for the past twelve years, with the happiest results. I have made known its value in this respect to a number of my medical brethren, and they have each expressed themselves as pleased and surprised at its power in allaying nausea and checking vomiting. The manner of administering it is as follows: Give one-quarter of a grain, dissolved in a tablespoonful of cold water, every four or five minutes until the vomiting is relieved; which will usually be in from ten minutes to half an hour. I give it in all cases of vomiting, except reflex, and that due to irritant poisons, and have found it succeed in ninety per cent. of my cases. Try it; you will be surprised and pleased. It is pleasant to take, rendering it more valuable in nausea and vomiting in children.

Yours truly, V. H. MOORE, M.D.,
Brockville, Ont., Nov. 1, 1887.

Antipyrine.

EDS. MED. AND SURG. REPORTER :

Sirs:—Antipyrine of late is becoming quite popular as an antipyretic, and a great many of our best physicians are using it to control high temperature, in preference to sulphate of quinine.

I have profited by reading the article of Prof. Germain Sée, published in the REPORTER, Oct. 8th, upon the use of antipyrine in painful affections of the head. I have used antipyrine in reducing and controlling temperature, which it does effectually and promptly, and have had some satisfactory results from its use in the treatment of migraine. But I would employ it with more satisfaction to myself if I knew what I was prescribing. I understand that antipyrine is a patent medicine, and I have not been able to ascertain what it is. I beg leave, therefore, to ask you kindly, of what is antipyrine composed? And when, if there is a patent on it, will that patent run out?

Fraternally yours, W. G. HOPKINS.

Fort Branch, Ind., Oct. 29, 1887.

[In reply to these questions, we would say that antipyrine is a complex chemical body derived from chinoline, and called in chemical terms: *Dimethyloxyguinazine*. The name of antipyrine was applied to it by the manufacturers for two reasons: first, as a convenient term which would indicate one of its most important properties; and, second, in order to have a name which they could copyright, to protect their interests. The "patent" referred to by our correspondent covers only the use of the name "antipyrine." The chemical substance may be made by any one who can.—EDS. REPORTER.]

—In the *Bulletin Général de Thérap.* Dr. Béranger-Féraud reports a remarkable case. A man twenty-six years old had received a stab-wound in the *left* temple some nine months before presenting himself at the hospital. He was sent to the hospital by some physician who had diagnosed the case as one of lachrymal tumor of the *right* side. Examination in this region showed the presence of what was supposed to be a small foreign body. The man was anesthetized, and a broken knife-blade two and three-fourths inches long by five-eighths inch wide was extracted. The blade had traversed the left orbit without wounding the eye, muscles, artery, or nerve, had crossed the nasal fossa, and entered the right orbit, and had produced no symptoms denoting its presence.—*Pop. Science News*, October, 1887.

NOTES AND COMMENTS.**Treatment of Gonorrhœa in Women.**

In the *Medical Chronicle*, October, 1887, Dr. W. J. Sinclair quotes Schwarz's treatment for an acute attack of gonorrhœa, with the view of preventing an extension of the specific inflammation beyond the vagina to the uterus and appendages. This treatment consists essentially in first swabbing out the vagina with cotton-wool, wet in a 1-1000 solution of bichloride. A Simon's speculum is used, so that the parts can be clearly seen, and be so distended that no fold or crevice will escape the germicide. Special care is to be taken of the introitus, which contains numerous follicles.

"The next step is to copiously dust the vagina and vulva with iodoform, which is still more effectively applied by rubbing it into the mucous membrane with the tip of the finger. To complete the process, the vagina is packed, with moderate firmness, full of iodoform gauze. If the treatment is very painful, a thing which depends upon the intensity of the disease process, and the idiosyncrasy of the patient, a narcotic or anæsthetic must be administered. The process is of value only when thoroughly carried out, but then it is certain to succeed.

If, as is usual in rubbing the vagina, there occurs extensive capillary hemorrhage, it is only a favorable sign, inasmuch as it shows that at the bleeding points the diseased epithelial covering is for the most part removed, and, at the same time, a large number of the superficial capillaries, which are perhaps diseased, are destroyed.

The iodoform gauze is permitted to remain for three or four days, and then the whole process is repeated with the same thoroughness, and over the same area. After four or five days more the gauze is finally removed, and then, for eight to fourteen days, the patient carries out a copious irrigation of the vagina with a sublimate solution of 1 in 2000.

This process was hardly ever known to fail. The vagina is red and raw after the second tampon has been removed, and there is usually a copious purulent discharge, but the gonococci are annihilated, and have forever vanished."

It may be fairly doubted whether any but German patients would submit to such treatment—they certainly would not outside of a hospital. A method of treatment formerly much in vogue at the Philadelphia Hospital of this city, consists in first syringing

out the vagina thoroughly with hot water containing bichloride, and then packing the vagina full of strips of patent lint, which have been previously well dusted with iodoform. Under this treatment, combined with rest and proper food, very few patients, who applied for treatment with an acute attack, were not well in four or five days, or a week.

Dr. Sinclair, who does not recommend Schwarz's treatment, regards gonorrhœa as primarily a disease of the uterus, and therefore injects into it the pure tincture of iodine through a Fritsch-Bozeman sound. This application, he says, should be repeated three days in succession, if no symptoms arise. The vagina may be protected from the iodine as it returns from the uterus by rapid and frequent changes of pledgets of cotton wool, or by constant irrigation with warm water. Vaginal irrigations are continued after the injections of iodine have been discontinued. After the lining of the uterus has broken down from the effects of the iodine, and is more or less expelled, the process of injecting iodine is repeated.

Ninety Bothriocephali Discharged from One Patient.

The *British Medical Journal* says: In the *Correspondenzblatt für Schweizer Aerzte*, August 15, 1887, Dr. Roux, Surgeon of the Cantonal Hospital, in Lausanne, describes a singular case in which the patient, a girl, aged 21½, discharged (after two doses of 90 grs. of extract of male fern) at least ninety bothriocephali lati. The worms passed out in a bundle, the patient assisting the delivery by tearing the package with both her hands, and at the same time uttering shrieks like a woman in labor. The agonizing delivery lasted ten minutes. The mass of parasites filled up a half of a chamber utensil. The disentangling and counting took exactly four hours and a half of the author's time. Numerous very long ribbons, which did not answer the necessary conditions, were left out of the reckoning; neither were any of the ribbons, which had been discharged several times by the girl for a couple of weeks previously, taken into account. There could be no doubt, therefore, that the number of worms, given as ninety, in reality far surpassed that figure. Except some slight nervous phenomena (such as occasional headaches, vivid dreams, *semi-somnambulisme*), the patient did not present any morbid symptoms. She was a robust and ruddy, and even cheerful and active, country girl, with excellent appetite and

digestion, and with 95 or 97 per cent. of hæmoglobin in her blood (as Gowers-Sahli's hæmoglobinometer showed). The case seems to give a support to Dr. Zschokke's theory, according to which the prevalence of bothriocephalus latus amongst the population residing around Lake Leman should be attributed to the eating of infected fish, mainly (*perchette*). At least the girl, who had come to the locality from Argovia about the Easter of 1884, during a period of several months' duration, in 1886, was dining on perch (and bothriocephali) once a week, or even still more often, the patient residing at the time at Bonvard, near the lake mentioned.

This case is of great interest in view of the published statements of Reyher and Runeberg, who look upon the bothriocephalus latus as the cause of pernicious anæmia.

Iodol Collodion.

Bilteryest (*Schweiz. Woch. f. Pharm.*) makes this as follows:

Iodol.....	10 parts.
Alcohol.....	16 parts.
Ether.....	64 parts.
Gun cotton.....	4 parts.
Castor oil.....	6 parts.

Dissolve the iodol in the mixture of alcohol and ether; add the gun cotton in small portions and well divided (teased out), and shake well till dissolved. Then add the castor oil.—*Druggist's Circular*.

Complete Occlusion of the Œsophagus with a Piece of Meat.

Drs. W. H. Bobbitt and K. P. Battle, Jr., report the following case in the *N. C. Medical Journal*, October, 1887. The patient was a boy, three years of age. Eighteen months ago he drank some lye, and was troubled at times thereafter with choking, but always relieved himself without treatment. No physician had been consulted, and the site and calibre of the stricture were unknown. The last attack of this kind occurred about one year ago. Until July 30, he was able to eat anything he pleased without difficulty. On that day, while eating lean ham, at 9 o'clock A. M., he suddenly choked and afterwards could swallow nothing, not even water. Dr. Bobbitt was called in the afternoon. Next morning the child was seen by Dr. Bobbitt and Dr. Battle in consultation. He was very thirsty and greedily attempted to drink water whenever it was offered him. He would take two or three mouthfuls, and the act of swallowing

would seem to be almost complete when the water would be returned, escaping through mouth and nose. This was generally followed by attempts at vomiting, which unfortunately could not dislodge the meat. He made no complaint of pain, but on being questioned on that point he would put his hand to the region of the larynx and at times to the stomach. There was no difficulty of breathing. On making an examination no obstruction could be felt by the finger. No œsophageal bougies being at hand, a soft rubber catheter, No. 12 E, was used and was stopped at a point several inches down the œsophagus. Smaller sizes were tried, but none would go further than the first. Mackenzie's œsophageal forceps were then introduced without difficulty to the obstruction. By pressing forward its point it could be felt in the depression just above the manubrium. Small shreds of ham fibre were brought up on closing and withdrawing the forceps, but the stricture could not be cleared by repeated efforts. In the afternoon of the same day, a curved stiff wire was inserted into a soft catheter, and endeavors were made to force the morsel past the stricture into the stomach without success. The same result followed the further use of the forceps. Apomorphia hypodermically was considered and put aside from fear of its depressing effect in the patient's weakened condition, and because, the stomach having been empty for so many hours, efforts at vomiting were likely to prove as abortive as before.

Acting upon a hint furnished by the report of a case, quoted by Mackenzie, in which pepsin was thought to have digested a "large soft substance" that had become impacted in the gullet, the following mixture was made:

R	Trypsin (Fairchild).....	gr. xxx
	Sod. bicarb.....	gr. x
	Aq. destil.....	ʒi
M.		

Having witnessed the digestive power of this mixture upon fibrin, it seemed reasonable to hope that it would digest the meat and relieve the obstruction. To make sure that it should reach the desired place, a small quantity of it was injected by means of an ear syringe through a rubber tube previously introduced down to the stricture. To prevent its immediate regurgitation, the tube was held in place more than ten minutes, the child of course protesting as vigorously as the presence of the tube and a gag in his mouth would admit. There being a limit to his endurance, the tube was not held in place

longer, though this would have been desirable. After the child had rested, the stiffened catheter was again tried, but could not be pushed into the stomach with the amount of force that it was thought advisable to use. A nutritive enema was ordered and three-fourths of a teaspoonful of the trypsin mixture was directed to be given every hour, with the expectation that a small proportion of it at least would remain in contact with the meat, and the patient was left for the night.

At 9 o'clock the next morning, when the child attempted to drink water, he swallowed without difficulty, just forty-eight hours after the impaction of the ham. A short time afterwards he vomited, and in the water ejected was found a number of fibres of the meat. It seems justifiable to conclude that the morsel had been so digested and softened by the trypsin that it was dislodged by the swallowing of the water.

Analysis of a Cure for Cancer.

Frank H. Moerk, Ph. G., in a paper read before the Pharmaceutical Meeting of the College of Pharmacy (*Am. Journ. Pharmacy*, Nov., 1887), reported the following result of his analysis of a black powder submitted to him for analysis by Prof. Maisch:

Moisture.....	0.99
Charcoal.....	36.82
Carbon.....	26.07
Extractive.....	6.40
Ash.....	4.35
Arsenious oxide.....	62.19
	100.00

Dr. Purcell, of Bristol, stated in a letter that this powder had undoubtedly cured many cases of epithelioma and other cancerous growths, and gave the following as the mode of application: Cover the surface lightly with the powder; apply over it, to protect the powder and keep it in place, a piece of *black* silk somewhat larger than the ulcer and made adhesive by egg albumen. Considerable pain is, of course, produced; but the first application, and all subsequent ones, is allowed to remain until the pain subsides, which will be in five or six days. A new one is then applied in the same way and repeated from time to time until an eschar is detached without force. A poultice of elm bark is applied and the ulcer allowed to heal.

It may be that the charcoal found by analysis is from *sheep sorrel*, as the person using it was known to collect that plant on different occasions. While the use of arsenious acid

for external application has long been made, yet every writer emphasizes the danger in using it where the cuticle is removed, and Dr. Purcell thinks most physicians like himself have feared to so use it for this reason.

Dr. Purcell also stated that this powder had a great reputation in the upper part of New Jersey, and that money had been freely offered to obtain the secret of its composition, but all offers had been declined.

It is probable that the previous application of cocaine with morphia would largely prevent subsequent pain from the application of the powder.

A Case of Verbal Amnesia due to Shock.

Dr. Waldo Briggs, of St. Louis, reported the following case to the *St. Louis Med. and Surg. Journal*, November, 1887: On Friday night, Sept. 30th, Mr. S., proprietor of a large cooperage at Jerseyville, Ill., after paying off his hands, found himself in possession of quite a large sum of money (between five and six hundred dollars), which had come in after banking hours. Having worked until after dark, he seated himself at his desk by a window, in full view of passers by on the street, counted his money, rolled it up and put it in his pocket preparatory to starting home. After locking up his office, he called at a grocery and bought a few articles, and then walked homeward, his residence being in the suburbs some half or three-quarters of a mile away. Just as he reached the corner of the low fence enclosing his house, and perhaps a hundred yards from his door, he was felled by a blow, delivered from behind the fence (and over the top of it), the weapon, as it afterward turned out, being a plough handle. As he fell, another assailant ran from across the street and belabored him over the head with a club made of a section of grape vine. After beating him into utter insensibility the robbers took his money and left him. Exactly how long he remained where he fell is not known, but probably half an hour. The first that was known of the affair by his family was when he staggered into the house, about 9 o'clock, covered with blood, unable to speak or to recognize any of the family, or to understand words spoken to him, but still grasping in his hands the bundle with which he started from the shop. He was hastily put to bed by the family and medical aid summoned.

An examination by the local physician disclosed several scalp wounds of greater or less severity, but no fracture of the skull.

The right parietal region seemed to have suffered the most, as it had received the first stunning blow, which was evidently delivered (taking the position of the assailant into consideration) by a left-handed man. Fortunately it glanced, and failing to crush the parietal bone, fractured the right superior maxilla badly.

Dr. Briggs was summoned, and on arriving at the house on the night of October 1, found the patient in a semi-conscious condition, apparently able to understand what was said to him, but unable to reply intelligibly, as there was total verbal amnesia, or probably it would be better to say *aphemia*. When he wished for a spoon, for instance, he would say "chair," "stove," "table" or substantives other than the correct ones; but that he knew what he wanted was proved by his becoming irritated if anything, other than the object desired, was offered him. A careful examination confirmed that of the local physicians as to the absence of fractures or other lesions of the calvarium.

During the time of Dr. Briggs' visit at the house, intelligence gradually returned to the patient, and when given a pencil and paper he managed, but very disjointedly, to make known his wants. While still unable to articulate the correct words, when he wished to express himself verbally, he was generally, though not always, able to write them. The first proper and clear answer that he was able to return was made shortly before Dr. Briggs' departure on October 2. When asked by his son if a certain suspected person was one of his assailants, he answered distinctly and without hesitation, "yes." Dr. Briggs says he has since heard from the patient several times, and the verbal amnesia has almost entirely disappeared, and the patient is rapidly recovering.

Some of the more curious features of the case are: (1) that he should in his utterly unconscious state have made his way home unaided; (2) that he should have recovered the package and carried it with him; (3) that the verbal amnesia should have extended simply to inability to speak the correct word.

—Dr. George Arthur, a passed assistant surgeon, U. S. Navy, left Washington November 2d, to go to Shelbyville, Tenn., to be married. The same night his body was found near the track of the Virginia Midland Railroad, not far from Salem, Va. It is not known how Dr. Arthur came to his death.

NEWS AND MISCELLANY.

Opium Importation.

It is stated in the New York *Commerical Advertiser* that the increase in the importation of opium is "surprising, almost startling." The Chinese Government has continued to remonstrate against the importation of opium from India, but without avail, and the importations rose from 7,055,657 pounds to 12,911,866 pounds between 1850 and 1880. It is now estimated that the amount of opium produced in Southwestern China is two and a half times the quantity imported from India. In time China will produce all the opium it consumes. Nine out of eighteen of its provinces now produce the drug, and four-fifths of the amount it consumes is now home grown. This increase is in the face of prohibiting edicts.

In the United States the amount of crude opium imported in 1872 was 189,354 pounds; in 1880, 243,211; in 1886, 471,276, and in 1887, 568,263 pounds. The years end June 30. The writer says: "Among the Buddhists, Moslems and Hindoos, to whom alcoholic beverages are prohibited and whose religious rites necessitate extended fasts, it is much used. Opium eating is chiefly practiced in Asia Minor, Persia and India, smoking in China and in the islands of the vicinity. Opium differs widely in its injurious effects, according to which of these different ways it is adopted. The weight of opinion is that smoking is the least injurious. The greatest per capita consumption of opium in the United States is in the city of Portland, Maine, a stronghold of prohibition. In India its sale is so great that there are stores which sell it exclusively. In this country its general sale is prohibited by law, but the law is not so strictly enforced but that it is easily obtained.—*Phila. Ledger*, Oct. 17, 1887.

The Quain Bequest.

Mr. Richard Quain, F.R.C.S., F.R.S., bequeathed almost the whole of his fortune, amounting to about £75,000, to University College, London, subject to certain annuities to family connections. The College will, we are informed, at once benefit to the extent of about £60,000, which sum is left to four trustees, to apply the annual income in "the promotion and encouragement in connection with University College, London, of general education in modern languages (especially

the English language and composition in that language) and in natural science." The trustees, Lord Justice Fry, Sir William Jenner, Mr. George Brodrick (the Warden of Merton), and Sir George Young, are authorized to carry out the testator's wishes, "either by salaries or other payments to those who teach, or by endowing professorships, or by pecuniary aid to those who are being taught, as by endowing scholarships or fellowships, or in any other manner in which the trustees may in their absolute discretion think proper," and they are requested to place themselves in communication with the Council of University College, with a view to preparing a scheme for carrying out the objects of the bequest. The testator desires that in any statement of the foregoing bequest the name of his brother, the late Sir John Richard Quain, shall be associated with his name.—*Brit. Med. Journ.*, Oct. 8, 1887.

A Good Place for Doctors.

The Evening Telegraph, of Philadelphia, says: Next to the undertaker's bill, the last it is within the disposition of man to pay is the doctor's dues. Gentlemen of the medical profession complain constantly that when a man gets well he forgets his physic. The perpetual invalid is the only patient who is always at the doctor's mercy. He must pay his bills or die. This is so the world over—except in Washington. Here there is a class of patients who would go half-starved for a week to pay their physician. Their board may go unpaid, they will do without a new gown or trousers—whichever they wear—and make even their washerwomen wait, but never the doctor! They will stint themselves and all their other creditors in the interest of their family physician. These patients are the Government clerks. They sometimes find it hard to keep the wolf from the door—or the creditor from the Department. The tailor, the milliner, the landlord, the milkman, the butcher, or the man who sells them sour bread for breakfast, may watch and wait in vain, but they will run after the doctor eagerly to pay him for a dose of physic! He holds a mysterious influence over them. They can't draw pay from the Government for the time they have spent in the sick-bed unless the doctor says so, and he won't say so until sure of his bill.

German Hospital.

—Thanksgiving Day, November 24, 1887, will be observed as Donation Day at the German Hospital, in Philadelphia.

Wholesome Advice.

Dr. J. E. Graham, of Toronto, in his address as President of the Canadian Medical Association (*Canada Medical and Surgical Journal*, October, 1887), took occasion to caution the members against the dangers of overwork, which too many ambitious medical men encounter, and told the following story in point of Dr. Golding Bird:

Dr. Routh, in his book on overwork, gives the following account of an interview with that distinguished man: "I well remember a conversation I had with the late Dr. Golding Bird a few weeks before his death. He was then in the zenith of his popularity, and recognized by all as one of the ablest of our London physicians. I called upon him one morning with a relative to consult him. Several other medical men preceded me. His rooms were full, and I had to wait three hours ere I could obtain admission to his study and consult about the case. I congratulated him on his success in practice. 'Yes,' he said to me, 'you are right; but I wish, nevertheless, to make your remark a text for a little parting advice. You see me at a little over forty in full practice, my rooms full, and making my several thousands per annum' (I think he said seven), 'and if I die to-morrow I do not leave as many hundreds to my family. All this I have done by sheer perseverance, unceasing hard work, and no holiday. But I am to-day a wreck. I have fatal disease of the heart, the result of anxiety and hard work. I know that I cannot live many months, and my parting words of advice to you are these, never mind at what loss, take your six weeks' holiday. It may delay your success, but it will insure its development. Otherwise you will find yourself at my age a prosperous practitioner, but a dying old man.' Six months after this conversation he had put off this earthly tabernacle."

Dr. Graham continues: "It is my opinion that in such cases it is not the scientific labor which is the cause of trouble, but it is the worry, anxiety and fatigue of family practice, in addition to the scientific work. We all know from personal experience how exhausting it is to visit day after day, upon a serious case of illness, especially if the patient is a near friend, or one of distinguished position in society. The amount of vital capital lost in these cases cannot be estimated. It is a singular fact that the large majority of cases of overwork occur among consulting physicians. Surgeons and specialists do not suffer to the

same extent. The reason of this is not far to seek. The amount of brain-work done by the physician, as a general rule, is very much greater than that done by the surgeon or specialist. The work of the latter, in most cases, is largely of a mechanical nature, and a great portion of their time is spent in manipulation. It is otherwise with the physician. Let us for a moment follow him in his every-day work. He must first attend to his correspondence. This is usually no slight task, especially if he answers all the letters sent by brother practitioners throughout the country."

"After the physician has finished his correspondence he is ready to receive patients. Together with a number of minor cases he may have two or three of difficult diagnosis, which may bring into exercise all his resources. He will write a detailed history of each case, and, perhaps, afterwards write his opinion and treatment in a letter to the attending physician. When he has finished a morning's work of this kind he is frequently so exhausted as to wish for the afternoon to rest. But he must then go to the hospital and, perhaps, for one or two hours he examines and tries to make clear to a class of students cases quite as difficult as those of the morning. He then visits his private patients. (On this continent we have yet very few purely consulting physicians.) This may occupy his time until six or seven o'clock. After dinner, he works at his lectures or other literary matter, and is at the same time harassed by numberless interruptions until nearly midnight. Then he may, like all medical men, be called up at night, or, if allowed to sleep, wakes up, perhaps tired, to continue his ceaseless toil. Is it any wonder that so many break down under such a strain?

The development of specialties has also added to the work of the physician. He cannot act simply as a distributing centre, sending one patient to this specialist and another to that; but he must learn to diagnose and treat many local diseases himself. This entails upon him the necessity of acquiring a knowledge of most of the specialties; and now, that familiarity with bacteriology is added as an almost necessary accomplishment, the field is too vast to contemplate.

The lessons to be learned from all this are:

1. That the rapid acquirement of a large and lucrative practice is often a great misfortune. It subjects the physician to the enmity of his older colleagues, often with and often without reason. It imposes burdens under which many fall, and it robs him of a happy and useful old age.

2. In the case of those who are ambitious to acquire professional favor for scientific work, the lesson is to avoid over-work. One ought not to try to become a noted physician and a rich man at the same time. It is a rare thing for a physician to amass a fortune: too rare to make it worth one's while to attempt it.

A very important lesson is to notice the first admonition of a general break-down, and to act upon the warning given. One of the best remedies is a prolonged holiday. This serves the purpose of giving the mind a complete rest. A long holiday is but of temporary benefit; the work must be cut down at home. Eight hours' sound sleep must be had at any cost. If the rest is broken by night calls, it must be made up in the morning. Some part of each day should be devoted to recreation. These are difficult rules to follow out in practice, but they are quite possible when a determined stand is taken.

Those who habitually over-work must remember that they are thus defeating the very object of their ambition. In the medical profession the best work should be done between 45 and 55. The late Dr. Flint did not issue his celebrated work on "Practice of Medicine" until he was over 50. We know from observation that medical men in health are at their best during those years. This being the case, it should be the aim of an ambitious physician, above all things, to maintain his health and vigor until he can reap the fruit of his earlier labor.

The most satisfactory, the most lasting, and the best work is done by those who are careful not to overtax themselves, but who so arrange their business as to take that recreation which the body so much needs.

I would not close this address without referring to the opposite condition: the spirit of apathy and inactivity which blights many physicians' lives. It is far better to live an active life of usefulness, even if one should be the sooner cut off, than to pass through this world as a miserable drone, of little use either to the family or community.

Our active professional and business men, those who shape our destinies as a nation, frequently exhibit one trait of character which might almost be considered a failing, viz., the expectation of immediate results from their labor. This is particularly noticeable in our western provinces and territories. We work hard, and if in a few years the reward of our toil is not within our grasp we chafe under the disappointment, become discontented, and determine either to change

the political character of our country or remove to lands where fortunes are said to be more rapidly made.

We have a vast territory, but one in which the material obstacles to rapid advance are great. These very difficulties ought to develop in us qualities of patient endurance and steady perseverance—qualities which will ultimately make this Canada of ours one of the greatest nations of the world.

Let us as physicians, not under the influence of haste and worry, but steadily and perseveringly, work in building up our own profession, so that in all matters which pertain to excellence we may be equal to that of the foremost nations."

The State Board of Health.

The regular meeting of the State Board of Health was held in Harrisburg on November 9, 1887. There were present Drs. Engelman, President; Lee, Secretary; Edwards, Dudley and Murphy, C. E. In his third annual report Secretary Lee referred at length to the death of Dr. Germer, the first President of the Board, and paid a high tribute to his memory. Dr. Lee says that at no time in his experience of ten years as Secretary of the Board have there been twelve months of such remarkable immunity from pestilence. The Secretary says one of the most important practical questions confronting the Board is the quarantine of the Delaware river, a matter which demands earnest attention. He recommends that the Board should urge upon Governor Beaver the importance of at once conferring with the Governors of Delaware and New Jersey, with a view to making joint application to the President of the United States for the grant of such portion of the reserve funds placed in his hands by Congress for meeting emergencies like the present, as may be necessary to immediately establish a National Quarantine Station, either at the site of the present Marine Hospital at the Delaware Breakwater, or Pea Patch Island, which station shall provide ample accommodations for quarantine purposes, as well as be supplied with all the modern appliances for disinfection of ships, cargoes, baggage and clothing.

—Chinamen who are fortunate enough to find a wild ginseng plant need not do any work for a year. The wild roots are worth from \$50 to \$100 an ounce. The cultivated root, however, is not worth more than from \$1.25 to \$2.00 per pound.—*West. Drug-gist.*

Items.

—William S. Stokley, Director of Public Safety in Philadelphia, has recommended that the Municipal Hospital be removed from Twenty-first and Lehigh avenue to the Lazaretto. It would be better to consolidate the Municipal and Philadelphia Hospitals, having a special department for contagious diseases, and remove the Almshouse to the House of Correction grounds.

—The *Philadelphia Ledger* states that Dr. S. Weir Mitchell, who is becoming as well known in secular as in medical literature, will shortly publish a novel called "In the Far West," the scene of which is laid in Elk and McKean counties, Pennsylvania, as they were sixty years ago. Dr. Mitchell has also just completed a volume of essays entitled "The Doctor and Patient," which is said to be intended chiefly for women, and to discuss the subjects in a popular rather than in a scientific way.

OBITUARY.

DR. WILLIAM ARMSTRONG.

Dr. William Armstrong, a retired physician and druggist, who was active in many charitable and reform movements in Philadelphia, died November 3d, in his eighty-seventh year.

DR. WILLIAM SELDEN.

Dr. William Selden, an old and prominent citizen of Norfolk, Va., and the wealthiest capitalists in this section, died Nov. 7th.

Dr. Selden was born in Norfolk, Va., in 1808. He studied at the University of Virginia, and took his degree of M. D. at the University of Pennsylvania, in 1830. After spending two years in study in the hospitals of Paris and London, he established himself in practice at Norfolk. He was a surgeon in the Confederate army, and had made a number of contributions to medical literature, among them a "Report on the Yellow Fever in Norfolk and Portsmouth in 1855."

DR. WILLIAM O'GORMAN.

Dr. William O'Gorman, one of the leading surgeons of the United States, died in Newark, N. J., November 10th, 1887, aged 63 years. He was born in Ireland, and graduated there, but came to this country in 1849. He was chief of the New Jersey medical staff during the war. He had been president of the State Medical Society and of the Essex County Medical Society, and was called in consultation when

President Garfield was shot. Dr. O'Gorman was brought prominently before the world two years ago through his connection with M. Pasteur in his treatment of the Newark hydrophobia patients.

DR. JOHN K. LEE.

Dr. John K. Lee, a well-known homœopathic physician, died in Philadelphia, November 10th, aged sixty-three years. He was born in Meadville, Crawford county, this State. He graduated in medicine in this city in 1851, and had been in active practice ever since. About three years ago Governor Pattison appointed Dr. Lee to the unexpired term of a member of the State Board of Public Charities, and he has been a member of that body ever since.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from Nov. 6, 1887, to Nov. 12, 1887:

Major Chas. R. Greenleaf, Surgeon. Par. 8, S. O. 248, A. G. O., Oct. 25, 1887, directing Surgeon Greenleaf to visit the recruiting depots and rendezvous at certain places, is amended to include Davenport, Iowa; Quincy, Ill., and Evansville, Ind. S. O. 257, A. G. O., Nov. 4, 1887.

Capt. Leonard Y. Loring, Assistant Surgeon, ordered for duty at Fort Mogave, Ariz. Ter., upon the expiration of his permit, with leave of absence. S. O. 258, A. G. O., Nov. 5, 1887.

Capt. Harry O. Perley, Assistant Surgeon, now on duty at Fort Wayne, Mich., ordered for temporary duty, with troops stationed at Highwood, near Chicago, Ill. S. O. 258, A. G. O., Nov. 5, 1887.

First Lieutenant F. J. Ives, Assistant Surgeon, granted leave of absence for one month, to take effect on or about the 15th inst. S. O. 113, Dept. Platte, Nov. 5, 1887.

List of Changes in the Medical Corps of the U. S. Navy, during the week ending Nov. 12, 1887:

Surgeon T. C. Heyl, detached from the "Marion," proceed home and wait orders.

Passed Assistant Surgeon T. C. Craig, detached from the "Marion," and to proceed home and wait orders.

Medical Inspector H. M. Wells, detached from the "Trenton," and to proceed home and wait orders.

Medical Director Geo. Peck, ordered to Washington, D. C., as member of Examining Board.

Surgeon Jas. G. Ayers, ordered to the "Galena" to relieve Surgeon F. L. Du Bois.

Surgeon F. L. Du Bois detached from the "Galena," and to proceed home and wait orders.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, two weeks ended Nov. 12, 1887:

Walter Wyman, Surgeon, to proceed to Louisville, Ky., and Memphis, Tenn., as Inspector. Nov. 12, 1887.

F. M. Urquhart, Passed Assistant Surgeon, relieved from duty at Cape Charles Quarantine, ordered to Norfolk, Va., Nov. 6, 1887.

G. M. Magruder, Assistant Surgeon, when relieved to rejoin station at Chicago, Ill., Nov. 3, 1887.